

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: _____ Examiner #: _____ Date: _____
Art Unit: _____ Phone Number 30 _____ Serial Number: _____
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Beverly C 4994</u>	NA Sequence (#) _____	STN _____
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Link _____
Date Completed: <u>08-08-9</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) <u>CGN</u>

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GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 8, 2001, 05:06:59 ; Search time 2474.55 seconds
(without alignments)
9267.790 Million cell updates/sec

Title: US-09-454-223-1
Perfect score: 1552
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 14155048 seqs, 7388405095 residues

Total number of hits satisfying chosen parameters: 28310096

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Pending_Patents_NA_Main:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1261.6	81.3	1477	US-09-454-223-5	Sequence 5, Appl1
3	798.6	51.5	1574	US-09-454-223-3	Sequence 3, Appl1
4	720.2	46.4	879	US-09-645-926A-1	Sequence 31, Appl1
5	710	45.7	1803	US-09-468-519-31	Sequence 31, Appl1
6	710	45.7	1816	PCR-US01-08655-373	Sequence 373, App
7	710	45.7	1816	PCR-US09-30930-1	Sequence 1, Appl1
8	710	45.7	1816	US-09-470-494-1	Sequence 1, Appl1
9	710	45.7	1816	US-09-470-494A-1	Sequence 1, Appl1
10	710	45.7	1816	US-09-645-926A-5	Sequence 5, Appl1
11	705.2	45.4	1833	US-09-577-408-4413	Sequence 4413, Ap
12	681.2	43.9	840	US-08-234-580-3	Sequence 3, Appl1
13	681.2	43.9	840	US-08-858-197-3	Sequence 3, Appl1
14	681.2	43.9	840	US-09-388-079-1	Sequence 1, Appl1
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16	666	42.9	839	US-09-023-655-919	Sequence 919, App
17	657.2	42.3	840	PCR-US94-00786-7	Sequence 7, Appl1
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ALIGNMENTS

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RESULT 1
US-09-454-223-1
; Sequence 1: Application US/09454223
; GENERAL INFORMATION:
; APPLICANT: Kornbluth, Richard S
; TITLE OF INVENTION: Multimeric forms of CD40L and other TNF family members
; CURRENT APPLICATION NUMBER: US/09/454,223
; CURRENT FILING DATE: 1999-12-09
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1552
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: 5'UTR
; LOCATION: (7)..(31)
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (88)..(799)
; OTHER INFORMATION: Mature murine surfactant protein D including hub
; OTHER INFORMATION: region, collagenous portion, and neck, but
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; OTHER INFORMATION: Human CD40 ligand extracellular region, including
; FEATURE:
; NAME/KEY: sig_peptide
; LOCATION: (32)..(88)
; OTHER INFORMATION: Signal peptide from murine surfactant protein D
; NAME/KEY: CDS
; LOCATION: (32)..(1444)
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Murine
; OTHER INFORMATION: surfactant protein D (without the CRD) fused to
; PUBLICATION INFORMATION: the extracellular portion of human CD40L
; AUTHORS: Spitz, Melanie K.
; AUTHORS: Arnltage, Richard J.
; AUTHORS: Strookbine, L.
; AUTHORS: Clifford, K M.
; AUTHORS: Macduff, B M.
; AUTHORS: Sato, T A.
; AUTHORS: Maliszewski, C R.
; AUTHORS: Fanslow, William C.
; TITLE: Recombinant human CD40 ligand stimulates B cell
; JOURNAL: J. Exp. Med.
; VOLUME: 176
; ISSUE: 6
; PAGES: 1543-1550
; DATE: 1992
; RELEVANT RESIDUES: 801 TO 1600
; PUBLICATION INFORMATION:
; AUTHORS: Motwani, M
; TITLE: Mouse surfactant protein-D. cDNA cloning,
; VOLUME: 155
; ISSUE: 12
; PAGES: 5671-5677
; DATE: 1995
; RELEVANT RESIDUES: 32 TO 800
US-09-454-223-1

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RESULT 2

US-09-454-223-5

Sequence 5, Application US/09454223

GENERAL INFORMATION:

APPLICANT: Kornbluth, Richard S

TITLE OF INVENTION: Multimeric forms of CD40L and other TNF family members

FILE REFERENCE: TNFSF-collection fusion proteins

CURRENT APPLICATION NUMBER: US/09/454,223

NUMBER OF SEQ ID NOS: 6

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 5

LENGTH: 1477

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Description of Artificial Sequence: Murine

OTHER INFORMATION: surfactant protein D (except CRD) fused to the

OTHER INFORMATION: extracellular domain of murine CD40 ligand

FEATURE:

NAME/KEY: 5'UTR

LOCATION: (7)..(31)

OTHER INFORMATION: 5' UTR from rat surfactant protein D

FEATURE:

NAME/KEY: sig_peptide

LOCATION: (32)..(88)

OTHER INFORMATION: Signal peptide from murine surfactant protein D

FEATURE:

NAME/KEY: CDS

LOCATION: (32)..(1441)

FEATURE:

NAME/KEY: misc_recomb

LOCATION: (88)..(799)

OTHER INFORMATION: Mature murine surfactant protein D including hub

OTHER INFORMATION: region, collagenous portion, and neck, but

OTHER INFORMATION: excluding carbohydrate recognition domain (CRD)

FEATURE:

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NAME/KEY: misc_feature
LOCATION: (800)..(1441)
OTHER INFORMATION: Murine CD40 ligand extracellular region, including
PUBLICATION INFORMATION:
AUTHORS: Motwani, M
AUTHORS: White, R A.
AUTHORS: Guo, N
AUTHORS: Dowler, L L.
AUTHORS: Tauber, A I.
AUTHORS: Motwani, M
TITLE: Mouse surfactant protein-D. cDNA cloning,
TITLE: characterization, and gene localization to chromosome
TITLE: 14.
JOURNAL: J. Immunol.
VOLUME: 155
ISSUE: 12
PAGES: 5671-5677
DATE: 1995
RELEVANT RESIDUES: 32 TO 800
PUBLICATION INFORMATION:
AUTHORS: Armitage, R
TITLE: Molecular and biological characterization of a murine
JOURNAL: Nature
VOLUME: 357
ISSUE: 6373
PAGES: 80-82
DATE: 1992
RELEVANT RESIDUES: 801 TO 1441
US-09-454-223-5

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Query Match 81.3%; Score 1261.6; DB 18; Length 1477;

Best Local Similarity 91.4%; Pred. No. 0;

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QY 1261 attcagagagatctatctatctatctatctatctatctatctatctatctatctatct 1257
Db 1261 attcagagagatctatctatctatctatctatctatctatctatctatctatctatct 1257
QY 1321 acatcattcattctgagagagagatctatctatctatctatctatctatctatctatct 1380
Db 1321 acatcattcattctgagagagagatctatctatctatctatctatctatctatctatct 1380
QY 1381 tctgacgtatcaaaagagagagagagagagagagagagagagagagagagagagag 1440
Db 1381 tctgacgtatcaaaagagagagagagagagagagagagagagagagagagagagag 1440
QY 1441 actctgaagctgagagagagagagagagagagagagagagagagagagagagagag 1437
Db 1441 actctgaagctgagagagagagagagagagagagagagagagagagagagagagag 1437

```

RESULT 3

US-09-454-223-3

Sequence 3 Application US/09454223

GENERAL INFORMATION:
 APPLICANT: Kohnluth, Richard S
 TITLE OF INVENTION: Multimeric forms of CD40L and other TNF family members
 FILE REFERENCE: TNSF-collectin fusion proteins
 CURRENT APPLICATION NUMBER: US/09/454,223
 CURRENT FILING DATE: 1999-12-09

```

? NUMBER OF SEQ ID NOS: 6
? SOFTWARE: PatentIn Ver. 2.1
? SEQ ID NO 3
? LENGTH: 1574
? TYPE: DNA
? ORGANISM: Artificial Sequence
? NAME/KEY: 5'UTR
? LOCATION: (7)..(31)
? OTHER INFORMATION: 5' UTR taken from rat sequence for surfactant
? FEATURE:
? NAME/KEY: sig-peptide
? LOCATION: (32)..(88)
? OTHER INFORMATION: Signal peptide from murine surfactant protein D
? FEATURE:
? NAME/KEY: CDS
? LOCATION: (32)..(1534)
? FEATURE:
? NAME/KEY: misc-feature
? LOCATION: (32)..(800)
? OTHER INFORMATION: Murine surfactant protein D including hub region,
? OTHER INFORMATION: collagenous portion, and neck, but excluding
? FEATURE:
? NAME/KEY: misc-feature
? LOCATION: (801)..(1534)
? OTHER INFORMATION: Murine RANKL/TRANCE extracellular region.
? PUBLICATION INFORMATION: Including stalk
? AUTHORS: Motwani, M
? AUTHORS: Guo, N
? AUTHORS: Dowler, L L
? AUTHORS: Tauber, A I
? TITLE: Mouse surfactant protein-D. cDNA cloning,
? TITLE: characterization, and gene localization to chromosome
? JOURNAL: J. Immunol.
? VOLUME: 155
? ISSUE: 12
? PAGES: 5671-5677
? DATE: 1995
? RELEVANT RESIDUES: 32 TO 800
? PUBLICATION INFORMATION:
? AUTHORS: Anderson, D M.
? TITLE: A homologue of the TNF receptor and its ligand enhance
? JOURNAL: Nature
? VOLUME: 390
? ISSUE: 6656
? PAGES: 175-179
? DATE: 1997
? RELEVANT RESIDUES: 801 TO 1534
US-09-454-223-3

```

Query Match

Best Local Similarity: 98.9%; Score 798.6; DB 18; Length 1574;

Matches 804; Conservative 0; Mismatches 9; Indels 0; Gaps 0;

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QY 1 gctaggaattccacagagagagagagagagagagagagagagagagagagagagagag 60
Db 1 gctaggaattccacagagagagagagagagagagagagagagagagagagagagagag 60
QY 61 gctgtagagagagagagagagagagagagagagagagagagagagagagagagagag 60
Db 61 gctgtagagagagagagagagagagagagagagagagagagagagagagagagagag 60
QY 121 acccaaacctgacccctgagagagagagagagagagagagagagagagagagagagag 120
Db 121 acccaaacctgacccctgagagagagagagagagagagagagagagagagagagagag 120
QY 121 acccaaacctgacccctgagagagagagagagagagagagagagagagagagagagag 180
Db 121 acccaaacctgacccctgagagagagagagagagagagagagagagagagagagagag 180

```

OY 181 tggagcagatcggagagagagatccacggggtgagaaaggttgatccaggttcgacgacc 240
|||||
Db 181 tggagcagatcggagagagagatccacggggtgagaaaggttgatccaggttcgacgacc 240
OY 241 tatgggggtctcagaggttgacagggccctacaggttcaggttggaacccaagagaaagagc 300
|||||
Db 241 tatgggggtctcagaggttgacagggccctacaggttcaggttggaacccaagagaaagagc 300
OY 301 ctccgctcggcagacccctggagcacaagggagagacgtggaactgaagctccagagactcc 360
|||||
Db 301 ctccgctcggcagacccctggagcacaagggagagacgtggaactgaagctccagagactcc 360
OY 361 aggtatctctggtccagctcgggaaagaggtccctctcgggaaagcaggggaaacataagacc 420
|||||
Db 361 aggtatctctggtccagctcgggaaagaggtccctctcgggaaagcaggggaaacataagacc 420
OY 421 tcaagggcaaacagagctccaaagagagagctgggcccagaagagagataggctgctcgg 480
|||||
Db 421 tcaagggcaaacagagctccaaagagagagctgggcccagaagagagataggctgctcgg 480
OY 481 catgcaagagatctcaaggggcaaaaagctccacagggcccagaaggagaaagaggtgcccc 540
|||||
Db 481 catgcaagagatctcaaggggcaaaaagctccacagggcccagaaggagaaagaggtgcccc 540
OY 541 tggctgcaagagagcccccagggagatgctggagcagagacccctgcagacctgacggctcc 600
|||||
Db 541 tggctgcaagagagcccccagggagatgctggagcagagacccctgcagacctgacggctcc 600
OY 601 acagggagctccagagctccacggggggcccccagagactcaaggggagacagaggtgtctcgg 660
|||||
Db 601 acagggagctccagagctccacggggggcccccagagactcaaggggagacagaggtgtctcgg 660
OY 661 agacagagagatcaaaagctgaaagcgggctccacagagagctgctcctcgaagcagagat 720
|||||
Db 661 agacagagagatcaaaagctgaaagcgggctccacagagagctgctcctcgaagcagagat 720
OY 721 gggggccttaaaagggaaacacagctcagaggttgctcctccacatacagaagc 780
|||||
Db 721 gggggccttaaaagggaaacacagctcagaggttgctcctccacatacagaagc 780
OY 781 tgcattgtccctcgtatggcacaagaaggttga 813
|||||
Db 781 tgcattgtccctcgtatggcagaagcagatga 813

RESULT 4
US-09-645-926A-1
Sequence 1, Application US/09645926A
GENERAL INFORMATION:
APPLICANT: AHUJA, SEEMA
APPLICANT: BONEWALD, LYNDIA
TITLE OF INVENTION: CD40 LIGAND AND CD40 AGONIST COMPOSITIONS AND METHODS OF USE
FILE REFERENCE: 4003,001,000
CURRENT APPLICATION NUMBER: US/09/645,926A
CURRENT FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: 60/151,250
PRIOR FILING DATE: 1999-08-27
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1
LENGTH: 879
TYPE: DNA
ORGANISM: Homo sapiens
US-09-645-926A-1

Query Match 46.4%; Score 720.2; DB 25; Length 879;
Best Local Similarity 99.6%; Pred. No. 2.3e-166;
Matches 722; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 795 atggcacaagaaggttgacaaagatagaagaatctcatgaagaattctgtat 854
|||||
Db 155 atcttcacagaaggttgacaaagatagaagaatctcatgaagaattctgtat 214

OY 855 tcatgaanaacgatacagagatgcaacacagaggaagaatccctactcctactgaactgtg 914
|||||
Db 215 tcatgaanaacgatacagagatgcaacacagaggaagaatccctactcctactgaactgtg 274
OY 915 aggaagatcaaaagccaggtctgaaagctctgtaagatatcaatgcttaaaacaaagagaga 974
|||||
Db 275 aggaagatcaaaagccaggtctgaaagctctgtaagatatcaatgcttaaaacaaagagaga 974
OY 975 cgaagaaagaaacagctctgaaatgcaaaaaggtgtaacgaatccctcaaaatttgaggac 1034
|||||
Db 335 cgaagaaagaaacagctctgaaatgcaaaaaggtgtaacgaatccctcaaaatttgaggac 394
OY 1035 atgtcataagtgagccagcagcaaaacacacatctgtgtacagctggggtggaagagat 1094
|||||
Db 395 atgtcataagtgagccagcagcaaaacacacatctgtgtacagctggggtggaagagat 1094
OY 1095 actaacacatgagcaacaaacttgtaacccctggaaaaatgggaaacagctgaacggttaaaa 1154
|||||
Db 455 actaacacatgagcaacaaacttgtaacccctggaaaaatgggaaacagctgaacggttaaaa 1154
OY 1155 gacaaagactataatataatgcccagaagtcacactctgttccaaatcggaagcttga 1214
|||||
Db 515 gacaaagactataatataatgcccagaagtcacactctgttccaaatcggaagcttga 574
OY 1215 gtcaagctccacttatagcagctctgctcaaaagctcccgagatctggaagagatct 1274
|||||
Db 575 gtcaagctccacttatagcagctctgctcaaaagctcccgagatctggaagagatct 634
OY 1275 tactcagagctgcaaaataacacagctccgcacaaactctgcgggcaaaacacacatccact 1334
|||||
Db 635 tactcagagctgcaaaataacacagctccgcacaaactctgcgggcaaaacacacatccact 694
OY 1335 tggagagagatctgaattgcaaacacaggtgtctcgggtgtgtgtcaatgtgaactccaa 1394
|||||
Db 695 tggagagagatctgaattgcaaacacaggtgtctcgggtgtgtgtcaatgtgaactccaa 754
OY 1395 gccaaagtgaagcactgagctgctcagctcagctccttggtcttaactcaaacctcgaacaggt 1454
|||||
Db 755 gccaaagtgaagcactgagctgctcagctcagctccttggtcttaactcaaacctcgaacaggt 814
OY 1455 caccctgcaagctgtgtgagctgagcgtcagcagctccttaataacagcagaagcttaa 1514
|||||
Db 815 caccctgcaagctgtgtgagctgagcgtcagcagctccttaataacagcagaagcttaa 874

RESULT 5
US-09-469-519-31
Sequence 31, Application US/09469519
GENERAL INFORMATION:
APPLICANT: THOMSON, ANGUS W
APPLICANT: LIU, LINA
TITLE OF INVENTION: GENETICALLY-MODIFIED ANTIGEN PRESENTING CELLS FOR THE
FILE REFERENCE: UPT-003
CURRENT APPLICATION NUMBER: US/09/469,519
CURRENT FILING DATE: 1999-12-22
EARLIER APPLICATION NUMBER: 60/113766
EARLIER FILING DATE: 1998-12-23
NUMBER OF SEQ ID NOS: 38
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 31
LENGTH: 1803
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (46)..(831)


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OY 1335 tgggagagagatcttgaattgcaaccaggctgcctggctgtcttgcacaatgtaataccaa 1394
Db 713 tgggagagagatcttgaattgcaaccaggctgcctggctgtcttgcacaatgtaataccaa 772
OY 1395 gccaaagtgaaccatctggacactgtgcttcacagctcccttgctgaaccacaactctgaacagtg 1454
Db 773 gccaaagtgaaccatctggacactgtgcttcacagctcccttgctgaaccacaactctgaacagtg 832
OY 1455 caactctgcaagcgtctggttgagagctgaacgctggagagcttcaataatacagcacagagcttaa 1514
Db 833 caactctgcaagcgtctggttgagagctgaacgctggagagcttcaataatacagcacagagcttaa 892
OY 1515 gcccaa 1520
Db 893 agccca 898

RESULT 7
PCT-US99-30930-1
: Sequence 1, Application PC/TUS9930930
: GENERAL INFORMATION:
: APPLICANT: University of Vermont and State Agricultural College
: APPLICANT: Newell, Martha Karen
: APPLICANT: Wagner, David H.
: APPLICANT: Newell, Evan
: TITLE OF INVENTION: Use of CD40 Engagement to Alter T Cell
: TITLE OF INVENTION: Receptor Usage
: FILE REFERENCE: 10277/7007MO/HCL/KA
: CURRENT APPLICATION NUMBER: PCT/US99/30930
: CURRENT FILING DATE: 1999-12-22
: EARLIER APPLICATION NUMBER: U.S. 60/114,106
: EARLIER FILING DATE: 1998-12-29
: NUMBER OF SEQ ID NOS: 2
: SOFTWARE: FastSeq for Windows Version 3.0
: SEQ ID NO 1
: LENGTH: 1816
: TYPE: DNA
: ORGANISM: Homo Sapiens
PCT-US99-30930-1

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Query Match	Similarity	45.7%	Score 710:	DB 11:	Length 1816:
Best Local Similarity	98.6%	Pred. No. 9, 5e-164:			
Matches 716:	Conservative	0:	Mismatches	10:	Indels 0: Gaps 0:
75	atgagcactgaagagctctgacacagaatagaagaatgaagaagaattcttcataatgaagattctgatat	854			
173	atctctcatagaagctcttgacacagatagaaatgtaaaaggaattcttcataatgaagattctgatat	232			
855	tcatgtaaaacagatcacagagatgcaaacacagagggaaaaagatccttatccttactgaactctg	914			
233	tcatgtaaaacagatcacagagatgcaaacacagagggaaaaagatccttatccttactgaactctg	292			
915	aggagagcttaaaagccagcttctgaagcctctctgtaagagatataatggtttaaacaagaagaaga	974			
293	aggagagcttaaaagccagcttctgaagcctctctgtaagagatataatggtttaaacaagaagaaga	352			
975	cgaaagaaagaaacacagctcttgtaaatgcaaaaaagtgatcagaatctctcaaatctgcggcac	1034			
353	cgaaagaaagaaacacagctcttgtaaatgcaaaaaagtgatcagaatctctcaaatctgcggcac	412			
1035	atgctcaatagctgagcgccagcgatgaataacacactctcgtgttaccgctgagcggaataagatat	1094			
413	atgctcaatagctgagcgccagcgatgaataacacacactctcgtgttaccgctgagcggaataagatat	472			
1095	actacacacatgagcaaacacactctgtatacccttgtaaaatggaagaacagctgaacgcttaaaa	1154			
473	actacacacatgagcaaacacactctgtatacccttgtaaaatggaagaacagctgaacgcttaaaa	532			
1155	gacaaagagactctatataatactatgcccagaatcaactctcgttcccaatcgggaagcttcga	1214			
533	gacaaagagactctatataatactatgcccagaatcaactctcgttcccaatcgggaagcttcga	592			

Oy	1215	ggaagagctccattatagaagcagcctctgcctaaagctcccccggatagagatccgaaggaatcct	1274
Db	593	gtcaagagctccattatagaagcagcctctgcctaaagctcccccggatagagatccgaaggaatcct	652
Oy	1275	tactcagagagctcgaaatatacccaagcttcgcgcgaacacctctgcggcgcaacatactcaact	1334
Db	653	tactcagagagctcgaaatatacccaagcttcgcgcgaacacctctgcggcgcaacatactcaact	712
Oy	1335	tggggaggagtatctgaaatctgcgaacccaggctgcctcgctgattctgatacagtcgataccaa	1394
Db	713	tggggaggagtatctgaaatctgcgaacccaggctgcctcgctgattctgatacagtcgataccaa	772
Oy	1395	gccaaagtgaagccaatgvcacatgcgtctcaacgtccctcttgagcttaactcaaaaactcgcgaacagtgct	1455
Db	773	gccaaagtgaagccaatgvcacatgcgtctcaacgtccctcttgagcttaactcaaaaactcgcgaacagtgct	832
Oy	1455	caaccttgcaagagctgctggctggagagctcagacgcggggagctctcaataatagaacacagagctcaa	1514
Db	833	caaccttgcaagagctgctggctggagagctcagacgcggggagctctcaataatagaacacagagagctcaa	892
Oy	1515	gcccaa	1520
Db	893	agccca	898

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RESULT      8
US-09-470-494-1
: Sequence 1, Application US/09470494
:
: GENERAL INFORMATION:
:
: APPLICANT: Newell, Martha Karen
: APPLICANT: Wagner, David H.
: APPLICANT: Newell, Evan
:
: TITLE OF INVENTION: Use of CD40 Engagement to Alter T Cell
:
: TITLE OF INVENTION: Receptor Usage
:
: FILE REFERENCE: 10277/7007/HCL/KA
:
: CURRENT APPLICATION NUMBER: US/09/470,494
:
: CURRENT FILING DATE: 1999-12-22
:
: EARLIER APPLICATION NUMBER: U.S. 60/114,106
:
: EARLIER FILING DATE: 1998-12-29
:
: NUMBER OF SEQ ID NOS: 2
:
: SOFTWARE: FastSeq for Windows Version 3.0
:
: SEQ ID NO 1
:
: LENGTH: 1816
:
: TYPE: DNA
:
: ORGANISM: Homo Sapiens
:
US-09-470-494-1

```

Query Match	Similarity	Score	DB	Length
Local	98.6%	9.5e-164		
Matches	716	Conservative	0	Mismatches 10; Indels 0; Gaps 0
Qy	795	atggcctaagaaagcttgagacagatagagaagagaaagaaatcctcatgaaagatttgat	854	
Dy	173	atcttcataagaaagcttgagacagatagagaagaaagaaatcctcatgaaagatttgat	232	
Qy	855	tcatgaaagaaatcagaaagatgcaaacacaaaggaagaaatcctcatcctgaactgtg	914	
Dy	233	tcatgaaagaaatcagaaagatgcaaacacaaaggaagaaatcctcatcctgaactgtg	292	
Qy	915	aggagaatcaaaagccagctcttgaaagcctctgtgaagagataataatgtaaacaaagagaga	974	
Dy	293	aggagaatcaaaagccagctcttgaaagcctctgtgaagagataataatgtaaacaaagagaga	352	
Qy	975	cgaaagaaagaaacagctcttgaaatgcaaaaagtgatcagaatcctcaaatgcygcac	1034	
Dy	353	cgaaagaaagaaacagctcttgaaatgcaaaaagtgatcagaatcctcaaatgcygcac	412	
Qy	1035	atgctcataagctggagccagcgcgttaaaaaaacctcgtgtctacgtggcggaagaaagat	1094	
Dy	413	atgctcataagctggagccagcgcgttaaaaaaacctcgtgtctacgtggcggaagaaagat	472	

QY 1095 actacacatgagcaacaactgtgttaacccctggaataatggaacagctgacgtttaaa 1154
 Db 473 actacacatgagcaacaactgtgttaacccctggaataatggaacagctgacgtttaaa 1154
 QY 1155 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1214
 Db 533 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1214
 QY 1215 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1215
 Db 593 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1215
 QY 1275 tactcagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1275
 Db 653 tactcagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1275
 QY 1335 tggagagatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1335
 Db 713 tggagagatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1335
 QY 1395 gccaagtgagcaatgagcactgtctacgttcccttgccttaactcaaatcctgaacagt 1454
 Db 773 gccaagtgagcaatgagcactgtctacgttcccttgccttaactcaaatcctgaacagt 1454
 QY 1455 caacttgagcgt 1514
 Db 833 caacttgagcgt 1514
 QY 1515 gcccaaa 1520
 Db 893 agccca 898

RESULT 9

US-09-470-494A-1
 ; Sequence 1, Application US/09470494A
 ; GENERAL INFORMATION:
 ; APPLICANT: Newell, Martha Karen
 ; APPLICANT: Wagner, David H.
 ; APPLICANT: Newell, Evan
 ; TITLE OF INVENTION: Use of CD40 Engagement to Alter T Cell
 ; FILE REFERENCE: 10277/7007/KCL/KA
 ; CURRENT APPLICATION NUMBER: US/09/470,494A
 ; PRIOR FILING DATE: 1999-12-22
 ; PRIOR APPLICATION NUMBER: U.S. 60/114,106
 ; NUMBER OF SEQ ID NOS: 2
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 1
 ; LENGTH: 1816
 ; TYPE: DNA
 ; ORGANISM: Homo Sapiens
 US-09-470-494A-1

Query Match 45.7%; Score 710; DB 18; Length 1816;
 Best Local Similarity 98.6%; Pred. No. 9.5e-164;
 Matches 716; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 795 atggcctatagaggttgagcaagatagaagaagaagaatctcctcgaagatttggat 854
 Db 173 atctctatagaaggttgagcaagatagaagaagaagaatctcctcgaagatttggat 854
 QY 855 tcatgaaacagatacagagatgcaacacagagaaagaaatcctcctcgaagatttggat 232
 Db 233 tcatgaaacagatacagagatgcaacacagagaaagaaatcctcctcgaagatttggat 232
 QY 915 aggaagattaaagcagcttgagcgttctggaagataatgtaaaacaaagagagaga 974
 Db 293 aggaagattaaagcagcttgagcgttctggaagataatgtaaaacaaagagagaga 974
 QY 975 cgaagaagaagaacagcttggaatgcaaaaagtgatcagaatcctcgaatgagcgcac 1034

Db 353 cgaagaagaagaacagcttggaatgcaaaaagtgatcagaatcctcgaatgagcgcac 412
 QY 1035 atgtcctaaagtgaagcagagatgaataacacatctgtgttaacgttggtcgaataagat 1094
 Db 413 atgtcctaaagtgaagcagagatgaataacacatctgtgttaacgttggtcgaataagat 1094
 QY 1095 actacacatgagcaacaactgtgttaacgttggaataatggaacagctgacgtttaaa 1154
 Db 473 actacacatgagcaacaactgtgttaacgttggaataatggaacagctgacgtttaaa 1154
 QY 1155 gccaagtgatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1214
 Db 533 gccaagtgatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1214
 QY 1215 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1215
 Db 593 gtaacagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1215
 QY 1275 tactcagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1275
 Db 653 tactcagacatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1275
 QY 1335 tggagagatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1335
 Db 713 tggagagatctatataatctatgccaagacacactctgttccaatcgggaagcttga 1335
 QY 1395 gccaagtgagcaatgagcactgtctacgttcccttgccttaactcaaatcctgaacagt 1454
 Db 773 gccaagtgagcaatgagcactgtctacgttcccttgccttaactcaaatcctgaacagt 1454
 QY 1455 caacttgagcgt 1514
 Db 833 caacttgagcgt 1514
 QY 1515 gcccaaa 1520
 Db 893 agccca 898

RESULT 10

US-09-645-926A-5
 ; Sequence 5, Application US/09645926A
 ; GENERAL INFORMATION:
 ; APPLICANT: AHUJA, SEEMA
 ; APPLICANT: BONEWALD, LYNDIA
 ; TITLE OF INVENTION: CD40 LIGAND AND CD40 AGONIST COMPOSITIONS AND METHODS OF USE
 ; FILE REFERENCE: 4003,001000
 ; CURRENT APPLICATION NUMBER: US/09/645,926A
 ; PRIOR FILING DATE: 2000-08-24
 ; PRIOR APPLICATION NUMBER: 60/151,250
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 5
 ; LENGTH: 1816
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 US-09-645-926A-5

Query Match 45.7%; Score 710; DB 25; Length 1816;
 Best Local Similarity 98.6%; Pred. No. 9.5e-164;
 Matches 716; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 795 atggcctatagaggttgagcaagatagaagaagaagaatctcctcgaagatttggat 854
 Db 173 atctctatagaaggttgagcaagatagaagaagaagaatctcctcgaagatttggat 854
 QY 855 tcatgaaacagatacagagatgcaacacagagaaagaaatcctcctcgaagatttggat 232
 Db 233 tcatgaaacagatacagagatgcaacacagagaaagaaatcctcctcgaagatttggat 232

QY 915 aggaatataaagccagcttgaagccttctgtgaagatataatgtttaacaaagagaga 974
|||||
Db 293 aggaatataaagccagcttgaagccttctgtgaagatataatgtttaacaaagagaga 352
QY 975 cgaagaaagaaacagccttctgaatctgaacaaagtgatcgaatccccaatttcgagac 1034
|||||
Db 353 cgaagaaagaaacagccttctgaatctgaacaaagtgatcgaatccccaatttcgagac 412
QY 1035 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaagat 1094
|||||
Db 413 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaagat 472
QY 1095 actacacatagagcaacacatctgtgtacacccctggaacaaatggaacagctgaacgttaaaa 1154
|||||
Db 473 actacacatagagcaacacatctgtgtacacccctggaacaaatggaacagctgaacgttaaaa 532
QY 1155 gacaaagatctatataatctatctgcccagaatccacctctgttccaatcgggaagcttcga 1214
|||||
Db 533 gacaaagatctatataatctatctgcccagaatccacctctgttccaatcgggaagcttcga 592
QY 1215 gtcaagctccatctttagccagcctctgtccttaagctcccccgttagatctgaagaaatct 1274
|||||
Db 593 gtcaagctccatctttagccagcctctgtccttaagctcccccgttagatctgaagaaatct 652
QY 1275 tactcagaagctgcaaaatcccaacagcttccgccaacaccttgagggaacaaatccatctac 1334
|||||
Db 653 tactcagaagctgcaaaatcccaacagcttccgccaacaccttgagggaacaaatccatctac 712
QY 1335 tgggaagagatattgaatctgaacaaacagctgtctgtgttctgaatctgaatctgaa 1394
|||||
Db 713 tgggaagagatattgaatctgaacaaacagctgtctgtgttctgaatctgaatctgaa 772
QY 1395 gccaaagtgaagcattgagcagcttcaagcttctgtcttaactaaactcgaacagctgt 1454
|||||
Db 773 gccaaagtgaagcattgagcagcttcaagcttctgtcttaactaaactcgaacagctgt 832
QY 1455 caacttgagagctgtgtgtgagagctgaagcttgaggagcttcaataaagaacagagcttaa 1514
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Db 833 caacttgagagctgtgtgtgagagctgaagcttgaggagcttcaataaagaacagagcttaa 892
QY 1515 gcccaa 1520
|||
Db 893 agccca 898

RESULT 11
US-09-577-408-4413
Sequence 4413, Application US/09577408
GENERAL INFORMATION:
APPLICANT: Tang, Y. Tom
APPLICANT: Tillinbacht, John
APPLICANT: Slinku, Ankura
APPLICANT: Liu, Chenghua
APPLICANT: Dmanac, Radoje T.
TITLE OF INVENTION: Novel Nucleic Acids and
FILE REFERENCE: 792
CURRENT APPLICATION NUMBER: US/09/577,408
CURRENT FILING DATE: 2000-05-18
NUMBER OF SEQ ID NOS: 8502
SOFTWARE: PC_GCT_genes Version 1.0
SEQ ID NO 4413
LENGTH: 1833
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: (1388)...(1709)
OTHER INFORMATION: similar to g11110587 in the genepet database release 115,
US-09-577-408-4413

Query Match 45.4%; Score 705.2; DB 22; Length 1833;
Best Local Similarity 98.2%; Pred. No. 1.4e-162;
Matches 713; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 795 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaatct 854
|||||
Db 190 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaatct 249
QY 855 tcatgaagaaacgatacagagatctgaacacagagaaagaaatcccttaactgaatctgtg 914
|||||
Db 250 tcatgaagaaacgatacagagatctgaacacagagaaagaaatcccttaactgaatctgtg 309
QY 915 aggaatataaagccagcttgaagccttctgtgaagatataatgtttaacaaagagaga 974
|||||
Db 310 aggaatataaagccagcttgaagccttctgtgaagatataatgtttaacaaagagaga 369
QY 975 cgaagaaagaaacagccttctgaatctgaacaaagtgatcgaatccccaatttcgagac 1034
|||||
Db 370 cgaagaaagaaacagccttctgaatctgaacaaagtgatcgaatccccaatttcgagac 429
QY 1035 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaatct 1094
|||||
Db 430 atgtcataagtgagccagccagcttaacaaacatctgtgtacagtgaggctgaagaaatct 489
QY 1095 actacacatagagcaacacatctgtgtacacccctggaacaaatggaacagctgaacgttaaaa 1154
|||||
Db 490 actacacatagagcaacacatctgtgtacacccctggaacaaatggaacagctgaacgttaaaa 549
QY 1155 gacaaagatctatataatctatctgcccagaatccacctctgttccaatcgggaagcttcga 1214
|||||
Db 550 gacaaagatctatataatctatctgcccagaatccacctctgttccaatcgggaagcttcga 609
QY 1215 gtcaagctccatctttagccagcctctgtccttaagctcccccgttagatctgaagaaatct 1274
|||||
Db 610 gtcaagctccatctttagccagcctctgtccttaagctcccccgttagatctgaagaaatct 669
QY 1275 tactcagaagctgcaaaatcccaacagcttccgccaacaccttgagggaacaaatccatctac 1334
|||||
Db 670 tactcagaagctgcaaaatcccaacagcttccgccaacaccttgagggaacaaatccatctac 729
QY 1335 tgggaagagatattgaatctgaacaaacagctgtctgtgttctgaatctgaatctgaa 1394
|||||
Db 730 tgggaagagatattgaatctgaacaaacagctgtctgtgttctgaatctgaatctgaa 789
QY 1455 caacttgagagctgtgtgtgagagctgaagcttgaggagcttcaataaagaacagagcttaa 1514
|||||
Db 850 caacttgagagctgtgtgtgagagctgaagcttgaggagcttcaataaagaacagagcttaa 909
QY 1515 gcccaa 1520
|||
Db 910 agccca 915

RESULT 12
US-08-234-580-3
Sequence 3, Application US/08234580
GENERAL INFORMATION:
APPLICANT: KEHRY, MERILYN R
APPLICANT: CASTLE, BRIAN E
TITLE OF INVENTION: METHODS FOR PROLIFERATING AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX
STREET: 100 NEW YORK AVE. N.W. SUITE 600
CITY: WASHINGTON
STATE: D.C.
ZIP: 20005
COMPUTER READABLE FORM:

Db	755	GCCTAGTACGCATGCGACTGCGCTTCACGCTCTTGGTACTCAAACTGACACAGT	814
Oy	1455	caacttgcaagcctgtgltgagcgcgga	1480
Db	815	CACCTTCAGCGCTGTGTTGACGCTGA	840

RESULT 13
US-08-858-197-3
Sequence 3, Application US/08858197
GENERAL INFORMATION:
APPLICANT: KEHRY, MERILYN R
APPLICANT: CASTLE, BRIAN E
TITLE OF INVENTION: METHODS FOR PROLIFERATING AND
NUMBER OF INVENTION: DIFFERENTIATING B CELLS, AND USES THEREOF
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERN, KESSLER, GOLDSTEIN & FOX
STREET: 100 NEW YORK AVE. N.W. SUITE 600
CITY: WASHINGTON
STATE: D.C.
ZIP: 20005

```

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/658,197
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/234,580
FILING DATE: 28-APR-1994
ATTORNEY/AGENT INFORMATION:
NAME: MILLMAN, ROBERT A
REGISTRATION NUMBER: 36,217
REFERENCE/DOCKET NUMBER: 1011.1030000/RAM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)371-2500
TELEFAX: (202) 371-2540
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 840 base pairs
TYPE: nucleic acid
STRANDEDNESS: both
TOPOLOGY: linear
MOLECULE TYPE: DNA
FEATURE:
NAME/KEY: CDS
LOCATION: 22...807
US-08-858-197-3

Query Match          43.98;      Score 681.2; DB 12; Length 840;
Best Local Similarity 99.6%; Pred. No. 8,8e-157;
Matches 683; Conservative 0; Mismatches 3; Indels 0; Gaps 0

QY    795 atggccatagaaagtcttgacaagaatagaagaatgaaagaattcctaagaatttgcgtat 854
Db     155 ATCTTATATGAAGGTTGCACAAAGATGAAAGATGAAAAGAATCCTCATGAAGATTGTGAT 214
QY    855 tcataaaaacggtactaaaggatatgcaaacacacagagagaagaatcccttatcccttaactgaactgtg 914
Db     215 TCATGAAAAACGATACAGAGATGCCAACACAGAGAGAAAGATCCCTTAATCCCTTAAGCACTGTG 274
QY    915 aggagattaanaagcagactttgaaggcctttggaaggatataatgtttaaacacaagaagaga 974
Db     275 AGGAGATTAAAGACCGACTTGAAAGCCTTTGTGAAGGATATATAATSTTAAACAAGAGAGAGA 334
QY    975 cgaagaagaagaagaaccttgaatatgcaaaaaaggtgcatcagaatccctccaatttcgcgcac 1034

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TITLE OF INVENTION: SOLUBLE LIGANDS FOR CDA0
 NUMBER OF SEQUENCES: 15
 CORRESPONDENCE ADDRESS:

ADDRESSER: Pennie & Edmonds

STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York

COUNTRY: U.S.A.
 ZIP: 10036-2711

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA: Patent in Release #1.0, Version #1.25

APPLICATION NUMBER: US/09/388,079A

FILING DATE: 31-Aug-1999

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Mistrock, S. Leslie

REGISTRATION NUMBER: 18, 872

REFERENCE/DOCKET NUMBER: 5624-251

TELEPHONE: 212 790-9090

TELEFAX: 212 869-8864/9741

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 840 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

FEATURE:

NAME/KEY: CDS

LOCATION: 22..807

SEQUENCE DESCRIPTION: SEQ ID NO: 1:

US-09-388-079A-1

Query Match

Best Local Similarity 43.9%; Score 681.2; DB 17; Length 840;

Matches 683; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 795 atggccatagaaggttgacacagatagaagaatgaagaatcttcacagagatttggat 854
DB 155 ATCTCATAGAGAGTTGGACAGATAGAGATGAAGAGATCTTCATGAAAGATTGTGTAT 214
QY 855 tcatgaaacagatagaagaatgcaacacaggaagaagaatccttactgaactgtg 914
DB 215 TCATGAAAAGATACAGATGCAACACAGAGAAAGATCCTTACTGACTGACTGTG 274
QY 915 aggaagatlaaagccagttgaagcttctggaagatataatgttaaaagaagagaga 974
DB 275 AGGAGATTAAAGCCAGTTTGAAGGCTTTGTGAAGATATATGTTAAACAAAGAGAGA 334
QY 975 ggaagaagaagaagaagcttgaagaagaagaagtgatcagaatcctcaaatctggcagc 1034
DB 335 CGAAGAAAAGAAAACAGCTTTGAAATGCAAAAAGGTGATCAGATCCTCAAAATTGCGGCAC 394
QY 1035 atgtcataagtgagggcagcagcgttaaacacatctgtgtacagtgagctgaagaagat 1094
DB 395 ATGTCATAGAGAGAGCCAGACAGTAAACAAACATCTGTGTACAGTGGGCTGAAAAAGAT 454
QY 1095 actaacacagagcaacaacttgtaacctggaagaatgggaacagctgaacgtttaa 1154
DB 455 ACTACACCAAGAGCAACACTTGTAACCTTGAAAAATGCAAAACAGCTGACCGCTTAA 514
QY 1155 gacaagagactctatctatctatgcccagctcctctgttccaaatcggaagcttga 1214
DB 515 GACAAGGACTCTATTTATATATATGCCCCAAGTCAACCTTGTCTCAATCGGGAAGCTTGA 574
QY 1215 gtcacagctccatcttaagccagcctctgctaagtcccccggtagatcgagagaatct 1274

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DB 575 GTCAGGCTCATTTATATACCAACGCTCTGCTTAAGTCCCCCGGTAGATTGAGAAATCT 634
QY 1275 tactagagctgcaaatatccccacagttccgccaaccttgagggaacaacatccatcact 1334
DB 635 TACTCAGAGCTGCAAAATACCCACAGTTCCGCCAAACCTTGGGGGCAACAAATCCATTCACT 694
QY 1335 tggagagagatattgaaattgaacacaggtgctcggtgttgatcaatgtaactgacaa 1394
DB 695 TGGAGAGAGTATTTGAAATTCACCAACAGGTGCTTCGGTGTGTCAAATGTACTGATCCAA 754
QY 1395 gccaagtgaagcatalggcactggttcacgtccttggcttactcaaacctcgaagagtg 1454
DB 755 GCCAAGTGAAGCCATGGCAGCTGGCTTACGTCCTTGGCTTACCAAACTGTAACAGTGT 814
QY 1455 caacctgcaagctgtgtgtgaagctga 1480
DB 815 CACCTTCAAGGCTGTGTGAGAGCTGA 840

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Search completed: August 8, 2001, 06:41:33
 Job time: 5674 sec

Db 490 actacacatgagcaactgtgtaacctggaataatggaacagctgaccttaaa
OY 1155 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 549
Db 550 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1214
OY 1215 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 609
Db 610 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1274
OY 1275 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 669
Db 670 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1334
OY 1335 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 729
Db 730 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1394
OY 1395 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 789
Db 790 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1454
OY 1455 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 849
Db 850 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 1514
OY 1515 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 909
Db 910 gacaagactctatctatctatgccaagtcacctctgtctccagtggagcttga 909

RESULT 2

US-09-760-481-46
Sequence 46, Application US/09760481
GENERAL INFORMATION:
APPLICANT: Rosen et al.
FILE REFERENCE: Nucleic Acids, Proteins, and Antibodies
CURRENT APPLICATION NUMBER: US/09/760,481
PRIOR FILING DATE: 2001-01-16
NUMBER OF SEQ ID NOS: 317
SOFTWARE: Patent Ver. 2.0
SEQ ID NO 46
LENGTH: 950
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (48)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (315)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (840)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (889)
OTHER INFORMATION: n equals a,t,g, or c
US-09-760-481-46

Query Match

Best Local Similarity 39.7%; Score 615.6; DB 5; Length 950;
Matches 657; Conservative 4; Mismatches 16; Indels 6; Gaps 3;

OY 795 atggccatagaagttgacagatagaagatgaagaatcttcaatgaagatttgcatt 854
|||||

Db 259 actctcatagaagttgacagatagaagatgaagaatcttcaatgaagatttgcatt 318
OY 855 tatctaaacgataagatgacacacagaggaagaatcttcaatgaagatttgcatt 914
Db 319 tatctaaacgataagatgacacacagaggaagaatcttcaatgaagatttgcatt 378
OY 915 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 974
Db 379 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 438
OY 975 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1034
Db 439 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 498
OY 1035 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1094
Db 499 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1154
OY 1095 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1214
Db 559 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1274
OY 1155 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 738
Db 619 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 798
OY 1215 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 858
Db 679 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 918
OY 1275 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 974
Db 739 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1034
OY 1335 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1094
Db 799 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1154
OY 1395 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1214
Db 859 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1274
OY 1450 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1334
Db 919 aggaatgaagaagcagtttgaagcttctggaagatataatgataaacaagaagaga 1394

RESULT 3

US-09-760-481-123
Sequence 123, Application US/09760481
GENERAL INFORMATION:
APPLICANT: Rosen et al.
FILE REFERENCE: Nucleic Acids, Proteins, and Antibodies
CURRENT APPLICATION NUMBER: US/09/760,481
PRIOR FILING DATE: 2001-01-16
NUMBER OF SEQ ID NOS: 317
SOFTWARE: Patent Ver. 2.0
SEQ ID NO 123
LENGTH: 950
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (48)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: SITE
LOCATION: (815)
OTHER INFORMATION: n equals a,t,g, or c


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; NAME/KEY: SITE
; LOCATION: (840)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (889)
; OTHER INFORMATION: n equals a,t,g, or c
US-09-760-481-123
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Query Match          39.7%: Score 615.6: DB 5: Length 950:
Best Local Similarity 96.2%: Pred. No. 3.8e-141:
Matches 657: Conservative 4: Mismatches 16: Indels 6: Gaps 3:
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QY 795 atggcctatagaaggttgcgaagatagaagatagaagaaatcttcataagaattttgtat 854
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Db 259 atctctatagaaggttgcgaagatagaagatagaagaaatcttcataagaattttgtat 318
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
855 tcatgaagaacgatacagaatgcgaacacaggaagaatcttcataagaattttgtat 914
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 319 tcatgaagaacgatacagaatgcgaacacaggaagaatcttcataagaattttgtat 378
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 915 aggaagattaaagccagcttgcgaagcttgcgaagatataatggttaaacacaagaagaga 974
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 379 aggaagattaaagccagcttgcgaagcttgcgaagatataatggttaaacacaagaagaga 438
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 975 cgaagaagaagaacacagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 1034
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 439 cgaagaagaagaacacagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 498
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1035 atgcatatagtgagagccagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 1094
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 499 atgcatatagtgagagccagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 558
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1095 actacacacatgagcaacacactggttaacccctggaaatgggaaacagctgacgttaaaa 1154
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Db 559 actacacacatgagcaacacactggttaacccctggaaatgggaaacagctgacgttaaaa 618
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QY 1155 gacaaagacatctatatactatctatgcccagaagtcacacttcgttccaaatcggaagacttga 1214
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Db 619 gacaaagacatctatatactatctatgcccagaagtcacacttcgttccaaatcggaagacttga 678
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QY 1215 gtcgaagctcccttttatacgaagcttcgtcctaagaatcccccgttaagttcgaagaactct 1274
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Db 679 gtcgaagctcccttttatacgaagcttcgtcctaagaatcccccgttaagttcgaagaawtct 738
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1275 tactcagaagctgcgaataatcccccagtttcgcgaacacttgcgggcaacacatcccttccact 1334
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QY 1335 tgggaagagatatttgaattgcgaacacaggtgcgttcgttgcgaatgtaactgataccaa 1394
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Db 799 tgggaagagatatttgaanttgcgaacacaggtgcgttcgttgcgaatgtaactgataccaa 858
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1395 gccaaagt-gagcacaatgcgaatggttcacgcttcgttgccttgccttgccttgccttgccttgc 1449
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 859 gccaaagtgcgaatgcgaatggttcacgcttcgttgccttgccttgccttgccttgccttgccttgc 918
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1450 agtg-tcaacttgcagctgttg 1471
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 919 agtg-tcaacttgcagctgttg 941
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
```

```

RESULT 4
US-09-760-485-323
; Sequence 323, Application US/09760485
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: P3217
; CURRENT APPLICATION NUMBER: US/09/760,485
; CURRENT FILING DATE: 2001-01-16
; Prior application data removed - consult PALM or file wrapper
; NUMBER OF SEQ ID NOS: 1477
```

```

; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 323
; LENGTH: 950
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (48)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (815)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (840)
; OTHER INFORMATION: n equals a,t,g, or c
; NAME/KEY: SITE
; LOCATION: (889)
; OTHER INFORMATION: n equals a,t,g, or c
US-09-760-485-323
```

```

Query Match          39.7%: Score 615.6: DB 5: Length 950:
Best Local Similarity 96.2%: Pred. No. 3.8e-141:
Matches 657: Conservative 4: Mismatches 16: Indels 6: Gaps 3:
```

```

QY 795 atggcctatagaaggttgcgaagatagaagatagaagaaatcttcataagaattttgtat 854
  || ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 259 atctctatagaaggttgcgaagatagaagatagaagaaatcttcataagaattttgtat 318
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
855 tcatgaagaacgatacagaatgcgaacacaggaagaatcttcataagaattttgtat 914
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 319 tcatgaagaacgatacagaatgcgaacacaggaagaatcttcataagaattttgtat 378
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 915 aggaagattaaagccagcttgcgaagcttgcgaagatataatggttaaacacaagaagaga 974
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 379 aggaagattaaagccagcttgcgaagcttgcgaagatataatggttaaacacaagaagaga 438
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 975 cgaagaagaagaacacagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 1034
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 439 cgaagaagaagaacacagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 498
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1035 atgcatatagtgagagccagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 1094
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 499 atgcatatagtgagagccagcttgcgaagcttgcgaagatagaagatagaagatagaagataga 558
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1095 actacacacatgagcaacacactggttaacccctggaaatgggaaacagctgacgttaaaa 1154
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 559 actacacacatgagcaacacactggttaacccctggaaatgggaaacagctgacgttaaaa 618
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1155 gacaaagacatctatatactatctatgcccagaagtcacacttcgttccaaatcggaagacttga 1214
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 619 gacaaagacatctatatactatctatgcccagaagtcacacttcgttccaaatcggaagacttga 678
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1215 gtcgaagctcccttttatacgaagcttcgtcctaagaatcccccgttaagttcgaagaactct 1274
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 679 gtcgaagctcccttttatacgaagcttcgtcctaagaatcccccgttaagttcgaagaawtct 738
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
1275 tactcagaagctgcgaataatcccccagtttcgcgaacacttgcgggcaacacatcccttccact 1334
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 739 tactcagaagctgcgaataatcccccagtttcgcgaacacttgcgggcaacacatcccttccact 798
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1335 tgggaagagatatttgaattgcgaacacaggtgcgttcgttgcgaatgtaactgataccaa 1394
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 799 tgggaagagatatttgaanttgcgaacacaggtgcgttcgttgcgaatgtaactgataccaa 858
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1395 gccaaagt-gagcacaatgcgaatggttcacgcttcgttgccttgccttgccttgccttgccttgc 1449
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
Db 859 gccaaagtgcgaatgcgaatggttcacgcttcgttgccttgccttgccttgccttgccttgccttgc 918
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
QY 1450 agtg-tcaacttgcagctgttg 1471
  ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
```



```
RESULT 7
US-60-278-258-10948
: Sequence 10948, Application US/60278258
: GENERAL INFORMATION:
: APPLICANT: Morris, MacDonald
: APPLICANT: Lal, Preeti
: TITLE OF INVENTION: Diep, Dinh
: TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
: FILE OF INVENTION: Polymorphisms Identified Thereby
: FILE REFERENCE: GX-0010-1 P
: CURRENT APPLICATION NUMBER: US/60/278,258
: CURRENT FILING DATE: 2001-03-23
: NUMBER OF SEQ ID NOS: 17730
: SOFTWARE: PERL Program
: SEQ ID NO 10948
: LENGTH: 6943
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc.feature
: OTHER INFORMATION: Incyte ID NO: 250186.4
US-60-278-258-10948

Query Match      8.5%  Score 131.8; DB 6; Length 6943;
Best Local Similarity 52.9%  Pred. No. 1.6e-22;
Matches 283; Conservative 0; Mismatches 252; Indels 0; Gaps 0;

OY 158 gagaaatgctcgtctgtctgtatgtacgagatgagagagagatccacgggtctgaag 217
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1178 gaagctgagacactgtctcagaaggtctgaagctgtgcccactgtctcagaatgtctcag 1237
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 218 gctgatacaggtcttgcagagactatgtgctcaggtctcaggtctcaggtctcaggtctcag 277
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1238 ggtcctctgtgtctcagagagatgagagagagagagagagagagagagagagagagagag 1297
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 278 gctgaaacccaagagagagatgtgtctgtctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 337
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1298 ccttgacaaagagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1357
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 338 ctatgtgacccctcagagactcctcaggtatctctgtgtgtgtgtgtgtgtgtgtgtgtgtgt 397
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1338 ataccaggtctctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1417
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 398 gggaaagcagggagaaactatgagactcagagcaaacaggtctcctaaagagagagctgtggccc 457
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1418 ggggagcagaggtctcctcaggtctcctcaggggagagaggtgaagctgtgccccaggtcca 1477
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 458 aaaaagaaagtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 517
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1478 gtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1537
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 518 cccaagagagaaagagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 577
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1538 ccaagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1597
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 578 ggaactgtcagagactgtcaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 637
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1598 ggaactgtcagagactgtcaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1657
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 638 aagagagagagagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 692
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 1658 ccaaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 1712
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

RESULT 8
US-60-278-258-10472
: Sequence 10472, Application US/60278258
: GENERAL INFORMATION:
: APPLICANT: Morris, MacDonald
: APPLICANT: Lal, Preeti
```

```
: APPLICANT: Diep, Dinh
: TITLE OF INVENTION: Method for the Identification of Sequence Polymorphisms Using
: TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
: FILE OF INVENTION: Polymorphisms Identified Thereby
: FILE REFERENCE: GX-0010-1 P
: CURRENT APPLICATION NUMBER: US/60/278,258
: CURRENT FILING DATE: 2001-03-23
: NUMBER OF SEQ ID NOS: 17730
: SOFTWARE: PERL Program
: SEQ ID NO 10472
: LENGTH: 3753
: TYPE: DNA
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: misc.feature
: OTHER INFORMATION: Incyte ID NO: 1000049.4
US-60-278-258-10472

Query Match      8.5%  Score 131.4; DB 6; Length 3753;
Best Local Similarity 52.9%  Pred. No. 1.7e-22;
Matches 282; Conservative 0; Mismatches 251; Indels 0; Gaps 0;

OY 147 gtatcccaacaggaatgctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 206
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2269 gtatccctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2328
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 207 ggggtgagagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 266
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2329 aggtgtgacaaaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2388
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 267 ctacaggtcaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 326
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2389 caaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2448
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 327 gagaacgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 386
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2449 gctgaaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2508
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 387 aaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 446
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2509 gaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2568
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 447 aggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 506
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2569 aacctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2628
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 507 gctcaacaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 566
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2629 gaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2688
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 567 ctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 626
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2689 aaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2748
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
OY 627 cccaagagactcagagagaggtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 679
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
Db 2749 ttctgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt 2801
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

RESULT 9
US-60-278-258-10792
: Sequence 10792, Application US/60278258
: GENERAL INFORMATION:
: APPLICANT: Morris, MacDonald
: APPLICANT: Lal, Preeti
: TITLE OF INVENTION: Diep, Dinh
: TITLE OF INVENTION: Method for the Identification of Sequence Polymorphisms Using
: TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
: FILE OF INVENTION: Polymorphisms Identified Thereby
: FILE REFERENCE: GX-0010-1 P
: CURRENT APPLICATION NUMBER: US/60/278,258
: CURRENT FILING DATE: 2001-03-23
```

INVENTION NUMBER: US/09/808,383
FILING DATE: 2001-03-13

PRIOR FILING DATE: 1999-09-15

[illegible]

```

RESULT 15
US-60-278-258-10582
; Sequence 10582, Application US/60278258
; GENERAL INFORMATION:
; APPLICANT: Morris, MacDonald
; APPLICANT: Lal, Preeti
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Method for the identification of Sequence Polymorphisms Using
; TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
; FILE REFERENCE: GX-0010-1 p
; CURRENT APPLICATION NUMBER: US/60/278,258
; CURRENT FILING DATE: 2001-03-23
; NUMBER OF SEQ ID NOS: 17730
; SOFTWARE: PERL Program
; SEQ ID NO 10582
; LENGTH: 4796
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: 1099943.4
; NAME/KEY: unsure
; LOCATION: 3618, 3629, 3634, 3637, 4408
; OTHER INFORMATION: a, t, c, g, or other
US-60-278-258-10582

```


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GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 8, 2001, 02:59:11 ; Search time 2762.57 Seconds

(without alignments)
8689.715 Million cell updates/sec

Title: US-09-454-223-1

Perfect score: 1552
Sequence: 1 gctagcgaattccaccagga.....agcattgtagacatgtacc 1552

Scoring table: IDENTITY-NUC
Gapop 10.0 , Gapext 1.0

Matched: 1344157 seqs, 7733874588 residues

Total number of hits satisfying chosen parameters: 2688314

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

GenEmbl: *
1: gb_ba1: *
2: gb_ba2: *
3: gb_ba3: *
4: gb_in1: *
5: gb_in2: *
6: gb_in3: *
7: gb_cm: *
8: gb_ov: *
9: gb_pat1: *
10: gb_pat2: *
11: gb_ph: *
12: gb_pl1: *
13: gb_pl2: *
14: gb_pl3: *
15: gb_pl4: *
16: em_ba1: *
17: em_ba2: *
18: em_fun: *
19: em_htgo_hum: *
20: em_htgo_inv: *
21: em_htgo_rod: *
22: em_htg_hum1: *
23: em_htg_hum2: *
24: em_htg_hum3: *
25: em_htg_hum4: *
26: em_htg_hum5: *
27: em_htg_hum6: *
28: em_htg_hum7: *
29: em_htg_hum8: *
30: em_htg_inv1: *
31: em_htg_inv2: *
32: em_htg_other: *
33: em_htg_rod: *
34: em_hum1: *
35: em_hum2: *
36: em_hum3: *
37: em_hum4: *
38: em_hum5: *
39: em_hum6: *
40: em_hum7: *
41: em_in: *
42: em_cm: *
43: em_or: *

44: em_ov: *
45: em_pat: *
46: em_ph: *
47: em_pl: *
48: em_rod: *
49: em_sts: *
50: em_sy: *
51: em_un: *
52: em_v1: *
53: gb_sts1: *
54: gb_sts2: *
55: gb_sts3: *
56: gb_sy: *
57: gb_un: *
58: gb_v11: *
59: gb_v12: *
60: gb_htg1: *
61: gb_htg2: *
62: gb_htg3: *
63: gb_htg4: *
64: gb_htg5: *
65: gb_htg6: *
66: gb_htg7: *
67: gb_htg8: *
68: gb_htg9: *
69: gb_htg10: *
70: gb_htg11: *
71: gb_htg12: *
72: gb_htg13: *
73: gb_htg14: *
74: gb_htg15: *
75: gb_htg16: *
76: gb_htg17: *
77: gb_htg18: *
78: gb_htg19: *
79: gb_htg20: *
80: gb_htg21: *
81: gb_htg22: *
82: gb_htg23: *
83: gb_htg24: *
84: gb_htg25: *
85: gb_pr1: *
86: gb_pr2: *
87: gb_pr3: *
88: gb_pr4: *
89: gb_pr5: *
90: gb_pr6: *
91: gb_pr7: *
92: gb_pr8: *
93: gb_pr9: *
94: gb_pr1: *
95: gb_pr2: *
96: gb_pr3: *
97: gb_pr4: *
98: em_ba3: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Query Length	DB ID	Description
1	790.4	50.9	1183	94 BC003705	BC003705 Mus muscu
2	778.6	50.2	1253	94 M05SPD	L40156 Mus musculu
3	720.2	46.4	879	10 AX090039	AX090039 Sequence
4	720.2	46.4	879	93 HSGP39MR	Z15017 H.sapiens m
5	710	45.7	1803	93 HSCD40	X67878 H.sapiens m
6	710	45.7	1816	97 HUMCD40L	L07414 Human CD40-
7	705.2	45.4	1822	93 HSTRAP4	X68550 H.sapiens T
8	698.8	45.0	1058	89 AF344841	AF344841 Cercocoebu

9	698.8	45.0	1058	89	AF344859
10	697.8	45.0	1265	95	RATSPD
11	681.2	43.9	840	9	AR044779
12	681.2	42.9	840	10	I23893
13	666	42.9	839	91	HACD0LT
14	659.2	42.5	974	89	AF344860
15	659.2	42.5	975	89	AF344860
16	657.2	42.3	840	9	AR076526
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18	657.2	42.3	840	9	AR078316
19	657.2	42.3	840	9	AR085419
20	657.2	42.3	840	9	AR103375
21	657.2	42.3	840	9	AR106246
22	657.2	42.3	840	10	I27345
23	648.2	41.8	840	10	I67828
24	648.2	41.1	1425	10	I87864
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28	638.2	41.1	1425	9	AR103378
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33	563.6	36.3	864	7	AR103381
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35	520.4	33.5	1410	93	BTCD0LIG
36	503.6	33.2	1385	7	AF344853
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38	483.8	31.2	1250	94	AF132496
39	478	30.8	788	7	AF079105
40	462.8	29.8	838	9	MMCD40
41	462.6	29.8	838	9	AF086771
42	457.8	29.5	783	94	AR044778
43	456.2	29.4	783	94	AF013985
44	456.2	29.4	783	9	AF116582
45	456.2	29.4	783	9	AR076918
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					AR085411
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					AF344859 Macaca mu
					M81231 Rat pulmona
					AR044779 Sequence
					I23893 Sequence 1
					X96710 H. sapiens m
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					AF344864 Callithri
					AR076926 Sequence
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					AR085419 Sequence
					AR103375 Sequence
					AR106246 Sequence
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					AR085425 Sequence
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					AF344853 Macaca ne
					X65018 H. sapiens m
					AF132496 Sus scrof
					AF079105 Felis cat
					X65453 M. musculus
					AF086771 Canis fam
					AR044778 Sequence
					AF013985 Rattus no
					AF116582 Rattus no
					AR076918 Sequence
					AR078308 Sequence
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D	b	549	GAGCCCGACGATTCCTGGACACAGACTCTGCCGACTGCCTCCACAGGAACTC	608
O	y	612	caggttcacgggccccccaggactcaaggaggagtglttccctggagacaaga	671
D	b	609	CAGGTTCACAGGGCCCCCAGACTCAAGGGGACAGAGTGTTCTTGGACAGAGAA	668
O	y	672	tcaaaagtgaagcgggtctccagaccagtgctgcctcgaaggacagatgagacctaa	731
D	b	669	TCAAAGGTGAAGCGGGCTTCACAGACAGTGTGCTCTGAGGACAGATGAGAGCTTAA	728
O	y	732	aaggaataactacggcgctctgagagttgccttcctccacatcacaaaagctgatctcc	791
D	b	729	AAGGAAAACCTACAGCGCTTAGAGTGTGCTTCTCCACATCATCAAAAGCTGATTC	788
O	y	792	ctgatggccatagaaagttgacaaagt	819
D	b	789	CTGATGGCCGAACTGTTGACAGACAAGAT	816
R	E	S	RESULT 2	
L	O	C	MUSSPD	1253 bp mRNA ROD 12-MAR-1996
D	E	F	DEFINITION	Mus musculus (clones 12.1, 2.1 and 4.1) surfactant protein D (Stfp4) mRNA, complete cds.
A	V	K	ACCESSION	I40156.1 GI:1129061
K	E	S	VERSION	1.0
Y	O	R	KEYWORDS	C-type lectin; collagenous lectin; collectin; surfactant protein D.
S	O	R	SOURCE	Mus musculus (strain B6/CBAJ) cDNA to mRNA.
O	R	G	ORGANISM	Mus musculus
R	E	F	REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Scurionath; Muridae; Murinae; Mus.
A	U	H	AUTHORS	1 (bases 1 to 1253) Mowatt,M., White,R.A., Guo,N., Dowler,L.L., Tauber,A.I. and Sastry,K.N.
T	I	T	TITLE	Mouse surfactant protein-D. cDNA cloning, characterization, and gene localization to chromosome 14
J	M	E	JOURNAL MEDLINE	J. Immunol. 155 (12), 5671-5677 (1995)
F	E	A	FEATURES	96094450
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			/db_xref="taxon:10090"	
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m	e	t	met_peptide	

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KEYWORDS
SOURCE human.
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.
AUTHORS Ahuja, S.U. and Bonewald, L.U.
TITLE CD40 agonist compositions and methods of use
JOURNAL Patent: WO 0116180-A 1 08-MAR-2001.
BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM (US)
FEATURES
Source Location/Qualifiers
1. 879
/organism="Homo sapiens"
/db_xref="taxon:9606"
BASE COUNT 274 a 193 c 190 g 222 t
ORIGIN

Query Match 46.4%; Score 720.2; DB 10; Length 879;
Best Local Similarity 99.6%; Pred. No. 2.3e-173;
Matches 722; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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155 ATCTTCATGAAGGTTGGACAGATAGAGATGAAGATCTTATGATGATTTGAT 214
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855 tcatgaagaatagatagatgacacacagagaagaatctctactgaactgtg 914
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215 TCATGAAGAAGATACAGATGACACAGAGAAAGATCCTTACTGAACTGTG 274
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915 aggaagatlaaagccagttgaaagccttgaaagatataatgttaacaaagaaga 974
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275 AGGAGATTAAAGCCAGTTGAAAGGCTTTGAAAGGATATATGTTAAACAAAGGAGGA 334
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975 cgaagaagaagaacacatttgaaatgcaaaaggatgacgaatcctcaattcgagac 1034
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335 CCAAGAAAGAAACAGCTTGAAGATGCAAAAGGTGATCAGAAATCTCAAAATTCGGGAC 394
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1035 atgtataagtgaggcgaacgaagaacacacatctgttaccgttgagcgtgaagaagat 1094
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395 ATGTATATAGTGAAGCCAGACAGTAAACACATCTGTCTACAGTGGGCTGAAAAAGGAT 454
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455 ACTACACATGAGCAACAACTGTMACCCTGGAANAATGGGAACACCTACCGTTAAA 514
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1155 gacaaagactcattatctatctgccaagatcactctgttccaatcggaagactcga 1214
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515 GACAAGACTGTATATATCTATGCCCAAGTCACTTCTGTTCCAAATCGGGAAGCTTGA 574
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1215 gtcaagctccattatagccagcctctgctaagaatcccccgttagatccgaagaatct 1274
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575 GTCAAGCTCCATTATATACCAAGCTCTGCTAAAGTCCCCCGGTAGATTGAGAGAAATCT 634
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1275 taaccagaagctgaataaaccacagttccgccaacacttgagggaacacatcactcact 1334
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635 TACTCAGAGCTGCAAAATACCAAGATTCGCCCAAACTTGCGGCAACAAATCATCTACT 694
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875 GCCCA 379
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RESULT 4
HSGP39MR 879 bp mRNA PRI 01-SEP-1996
LOCUS H.sapiens mRNA for glycoprotein 39 (gp39).
DEFINITION Z15017.1 S49392
ACCESSION Z15017.1 GI:38483
VERSION 215017.1
KEYWORDS glycoprotein 39.
SOURCE human.
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.
AUTHORS Hollenbaugh, D., Grosmaire, L.S., Kullas, C.D., Chalupny, N.J.,
Hollenbaugh, D., and Aruffo, A.
TITLE The human T cell antigen gp39, a member of the TNF gene family, is
a ligand for the CD40 receptor: expression of a soluble form of
gp39 with B cell co-stimulatory activity
EMBO J. 11 (12), 4313-4321 (1992)
93049181
2 (bases 1 to 879)
Hollenbaugh, D.L.
Direct Submission
Submitted (27-AUG-1992) Diane L Hollenbaugh, Bristol-Myers Squibb
PRI, Seattle, WA, 98121
3 (bases 1 to 879)
Hollenbaugh, D.
Direct Submission
Submitted (21-SEP-1992) Diane L Hollenbaugh, Bristol-Myers Squibb
PRI, Seattle, WA, 98121
The original submission [1] reported 934bp.
COMMENT
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Location/Qualifiers
1. 879
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/cell_type="PHA-activated T-cells"
22. 807
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BASE COUNT 274 a 193 c 190 g 222 t
ORIGIN

Query Match 46.4%; Score 720.2; DB 93; Length 879;
Best Local Similarity 99.6%; Pred. No. 2.3e-173;
Matches 722; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

795 atggccatgaagaggttgacagaatagaagaatgaagaatctcatgaagatttgat 854
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155 ATCTTCATGAAGGTTGGACAGATAGAGATGAAGATCTTATGATGATTTGAT 214
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855 tcatgaagaatagatagatgacacacagagaagaatctctactgaactgtg 914
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215 TCATGAAGAAGATACAGATGACACAGAGAAAGATCCTTACTGAACTGTG 274
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915 aggaagatlaaagccagttgaaagccttgaaagatataatgttaacaaagaaga 974
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275 AGGAGATTAAAGCCAGTTGAAAGGCTTTGAAAGGATATATGTTAAACAAAGGAGGA 334
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975 cgaagaagaagaacacatttgaaatgcaaaaggatgacgaatcctcaattcgagac 1034
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335 CCAAGAAAGAAACAGCTTGAAGATGCAAAAGGTGATCAGAAATCTCAAAATTCGGGAC 394
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OY 1035 atgtcataagtggagccagcagtaaaacacatctgttctacagttgggttgaaaaaggat 1094
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DB 395 ATGTCATTAAGTAGAGCCAGCAGTAAACAAACATCTGTGTACAGTGGCTGAAAAAGGAT 454
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OY 1095 acttcacacatgagcaaacacttggtaaccccttgaaaaatggaaaaaacatcagcgtttaa 1154
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DB 455 ACTACACCTAGAGCAACACTGTGTAACTTGGAAAAATGGGAAACACCTGACCGTTTAAA 514
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|||||
DB 515 GACAAAGACTTATATATATATATATGCCCCAAGTCACTTCTTCCAAATCGGAGAGCTTGA 574
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OY 1215 gtcaagctccatctatagcagcctctgtcctaaagtcacccggctagaatcagagaactc 1274
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DB 575 GTCAAGCTCCATTTATAGCAGCAGCTGTGCTTAAAGTCCCGGAGAGATTGAGAGAACT 634
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OY 1275 tactcaagctgcgaataaccacagttccgcgaacaccttgagggaacaaatccatccact 1334
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DB 635 TACTCAGAGCTGCAAAATACCCACAGTTCGGCCAAACCTTGGGCAACAAATCCATTCACT 694
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OY 1335 tggagagagatcttgaatctgaacaaagtgcttcgtgttctgcaatgtgactatccaa 1394
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DB 695 TGGAGAGAGTATTGCAATTCGCAACAGGTCGCTGCTTGTTCAAATGTGACTATCCAA 754
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OY 1395 gccaaagtgcagcatgcaatgcttgcacagtccttgccttactcaaacctcgaacagtg 1454
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DB 755 GCCAAGTAGGCAATGCGACTGCTTACCTCTTGGCTTACTCAAACTCGAACAGTGT 814
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OY 1455 caacttcgaagctgtgtgtgagagctgaagcttgaggagcttcatataacagcagagctaa 1514
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DB 815 CACCTTGACAGCTGTGTGTGAGAGCTGACGCTGGGAGTCTTATATACAGCAGAGCTTAA 874
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DB 875 GCCCA 879
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RESULT 5
LOCUS HSCD40 1803 bp mRNA PRI 06-JUN-1997
DEFINITION H.sapiens mRNA for CD40 ligand.
ACCESSION X67878.550586
VERSION X67878.1 GI:38411
KEYWORDS glycoprotein.
SOURCE human.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 1803)
AUTHORS Spriggs, M.
TITLE Direct Submission
JOURNAL Submitted (28-JUL-1992) M. Spriggs, Immunex Res & Development
Corporation, 51 University Street, Seattle WA 98101, USA
2 (bases 1 to 1803)
REFERENCE Spriggs, M.K., Armistead, R.J., Strockline, L., Clifford, K.N.,
AUTHORS Macdill, B.M., Sato, T.A., Maliszewski, C.R. and Fanslow, W.C.
TITLE Recombinant human CD40 ligand stimulates B cell proliferation and
JOURNAL Immunoglobulin E secretion
MEDLINE J. Exp. Med. 176 (6), 1543-1550 (1992)
FEATURES
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Location/Qualifiers
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/db_xref="taxon:9606"
/cell-type="peripheral blood T-cell"
46..831
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/protein_id="CAA48077.1"
/db_xref="GI:38412"
/db_xref="SWISS-PROT:P29965"
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Best Local Similarity 98.6%; Pred. No. 9,6e-171;
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DB 179 ATCTTCATAGAAAGTTGGACAAAGATAGAAATGAAAGAACTTCATGAGATTTGTAT 238
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OY 855 tcaatgaagaacgatacagaagatgcaacacagagaagaatccttactgaactgtg 914
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DB 239 TCATGAAAACGATACAGAGATGCAACACAGAGAAAGATCTTATCTTACTGAATGTG 298
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OY 915 agagatataaagccagtttgaaggtcttgaaagataatgtttaaacaagaagagaga 974
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DB 299 AGGAGATTAAAGCCAGTTTGAAGGCTTTGTGAAGATATATATTTAAACAAAGAGAGA 358
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OY 975 cgaagaagaagaacagcttgaagaatgcaaaagtgatcagaatccccaattcggcac 1034
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DB 359 CGAAGAAAGAAACAGCTTTGAATGCAAAAGTGTATGAAATCCCAATTTGGGGAC 418
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OY 1035 atgtcataagaatgagcagcagcaataaacaacatctgttatacagttgggtgaaaaaggat 1094
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DB 419 ATGTCATTAAGTAGAGCGACGACACTAAACAAACATCTGTGTACAGTGGCTGAAAAAGAT 478
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OY 1095 actaacacatgagcaacaacttgtgtaacctggaanaatgggaacagctgaacgtttaa 1154
|||||
DB 479 ACTACACCATGAGCAACAACTTGTAACTTGGCAAAATGGGAAACACTGACCGTTAAA 538
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OY 1155 gacaaagacatctatatactatctatgcccagaatcaccctctgttccaaatcggaagcttcca 1214
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DB 539 GACAAAGACTGTATATATATATATGCCCCAAGTCACTTCTTCCAAATCGGAGAGCTTGA 598
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OY 1215 gtcaagctccatctatagcagcctctgtcctaaagtcaccccggtgagattcgaagaaact 1274
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DB 599 GTCAAGCTCCATTATTATAGCAGCCTGTGCTTAAAGTCCCGGTGATTTCAAGAAACT 658
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OY 1275 tactcaagctgcgaataaccacagttccgcgaacaccttgcggcgaacaaatccatccact 1334
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DB 659 TACTCAGAGCTGCAAAATACCCACAGTTCGCGCAAACTTGGGCAACAAATCCATTCACT 718
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OY 1335 tggagagagatcttgaatctgaacaaacagtgcttcgtgttctgcaatgtgactatccaa 1394
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DB 719 TGGAGAGAGTATTGCAATTCGCAACAGTCTTCCGCTTGTTCAAATGTGACTATCCAA 778
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OY 1395 gccaaagtgcagcatgcaatgcttgcacagtccttgccttactcaaacacttgaacagtg 1454
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DB 779 GCCAAGTAGGCAATGCACTGCTTACGTCCTTGGCTTACTCAAACTCGAACAGTGT 838
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OY 1455 caacttcgaagctgtgtgtgagagctgaagctggagagcttcatataacagcagagcttaa 1514
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DB 839 CACCTTGACAGCTGTGTGTGAGAGCTGACGCTGGGAGTCTTATATACAGCAGCAGGTTA 898
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DB 899 AGCCCA 904
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RESULT 6
LOCUS HUMCD40L 1816 bp mRNA PRI 27-APR-1993
DEFINITION Human CD40-ligand mRNA, complete cds.
ACCESSION L07414
VERSION L07414.1 GI:180123

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Query Match	Similarity	45.4%	Score 705.2	DB 93	Length 1822
Best Local	98.2%	Pred. NO. 1.6e-159			
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Db	atcttcattgaaagcctgggacacagatgacacagatgaaagaaatcttcattgacgactggg	249			
Oy	lcatgaaaaacgtacacagagatgcacacacagagaagaatcctcatcctacgaaactcgtg	914			
Db	tcattgaaaaacgtatcacagatgacacacagagaagaatcctcatcctacgaaactcgtg	309			
Oy	aggagaatcaaaagccagcttgcgaagcttgcgaagatataatgcttzaaacaagaagaga	974			
Dp	acgagattttaaaccagatttgaaagccttgcgaagatataatgcttzaaacaagaagaga	369			
Dp	cgaaagaagaagaacagcttgcgaagatgcacacacagagaagaatcctcatcctacgaaac	1034			
Db	cgaaagaagaagaacagcttgcgaagatgcacacacagagaagaatcctcatcctacgaaac	429			
Oy	atgctacaaagtcgaagccagcagtaaaacaacatctgctgctcagtgagctgaagaagat	1094			
Db	atgctacaaagtcgaagccagcagtaaaacaacatctgctgctcagtgagctgaagaagat	489			
Oy	actacacacatgagcaacaaccttgcgaagcttgcgaagaaatgggaagaagctgaccgttaaa	1154			
Db	actacacacatgagcaacaaccttgcgaagcttgcgaagaaatgggaagaagctgaccgttaaa	549			
Oy	gacaaaggaatctcttatctatctatgcgaagcagcacttctgttcgaatctgggaagcttga	1214			
Db	gacaaaggaatctcttatctatctatgcgaagcagcacttctgttcgaatctgggaagcttga	609			
Oy	gtcaagctccattatcagcagcctcgcctaaagctcccggtatgactcgagaagatct	1274			
Dp	gtcaagctccattatcagcagcctcgcctaaagctcccggtatgactcgagaagatct	669			
Oy	tactcagagctgcgaatcaccacagcttcgcgcgaacacttgcggaagaacatcacttact	1334			
Db	tactcagagctgcgaatcaccacagcttcgcgcgaacacttgcggaagaacatcacttact	729			
Oy	tgggaagagatcttgaatgcgaacacagctgctcgtggttgcgaatgagactgattcga	1394			
Dp	tgggaagagatcttgaatgcgaacacagctgctcgtggttgcgaatgagactgattcga	789			
Dp	gccaaagtcgacatgcgaacacagcttgcgcgcgaacacttgcggaagaacatcacttact	1454			
Oy	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	1514			
Dp	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
Oy	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
Dp	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
Oy	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
Dp	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
Oy	gacccctgcgaagctgctggttgcgaacacagctgctggttgcgaacacagcttgcga	909			
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TITLE	WEISS, W. R. and Ansari, A. A.
JOURNAL	Cloning, sequencing and homology analysis of nonhuman primate
REFERENCE	Pas/Pas-Ligand and co-stimulatory molecules
AUTHORS	Immunogenetics (2001) In press
TITLE	2 (bases 1 to 1058)
JOURNAL	Villinger, F.
FEATURES	Direct Submission
SOURCE	Submitted (02-FEB-2001) Pathology and Laboratory Medicine, Emory
	University School of Medicine, Winship Cancer Institute, 1365B
	Clifton Rd, Atlanta, GA 30322, USA
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 Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 Cercopithecoidea; Macaca.

REFERENCE
 AUTHORS Villinger, F., Bostik, P., Mayne, A.E., King, C.L., Genain, C.P.,
 Weiss, M.R. and Ansari, A.A.
 Cloning, sequencing and homology analysis of nonhuman primate
 Fas/Fas-ligand and co-stimulatory molecules
 Immunogenetics (2001) In press

JOURNAL
 TITLE Direct Submission
 AUTHORS Submitted (02-FEB-2001) Pathology and Laboratory Medicine, Emory
 University School of Medicine, Winship Cancer Institute, 1365B
 Clifton Rd. Atlanta, GA 30322, USA

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 Db 888 AGCCCA 893

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 DEFINITION Rat pulmonary surfactant protein (SP-D) mRNA, complete cds.
 ACCESSION M81231
 VERSION M81231.1 GI:207035
 KEYWORDS pulmonary surfactant-associated protein SP-D.
 SOURCE Rattus norvegicus (strain Fisher 344) Lung cDNA to mRNA.
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 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.
 1 (bases 1 to 1265)
 Shimizu, H., Fisher, J.H., Papst, P., Benson, B.J., Lau, K., Mason, R.J.
 and Voelker, D.R.
 Primary structure of rat pulmonary surfactant protein D: cDNA and
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 J. Biol. Chem. 267, 1853-1857 (1992)
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DEFINITION Sequence 1 from patent US 5540926.
ACCESSION 123893.1 GI:1603763
VERSION 123893.1
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 840)
AUTHORS Aruffo, A., Hollenbaugh, D. and Ledbetter, J. A.
TITLES Soluble and its use in B cell stimulation
JOURNAL Patent: US 5540926-A 1 30-JUL-1996;
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AUTHORS Grammer, A.C., Bergman, M.C., Miura, Y., Fujita, K., Davis, L.S. and
Lipsky, P.E.
TITLES The CD40 11gand expressed by human B cells costimulates B cell
responses
JOURNAL J Immunol. 154 (10), 4996-5010 (1995)
MEDLINE 95248064
REFERENCE 2 (bases 1 to 839)
AUTHORS Grammer, A.C.
TITLES Direct Submission
JOURNAL Submitted (27-JAN-1996) A.C. Grammer, UTSM Medical Center at
Dallas, 5323 Harry Hines Blvd., Dept. of Rheumatology, Dallas, TX
75235-8577, USA
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 LOCUS Aotus trivirgatus CD154 protein mRNA, complete cds.
 DEFINITION AF344860
 ACCESSION AF344860
 VERSION AF344860.1 GI:13650017
 KEYWORDS
 SOURCE
 ORGANISM
 Aotus trivirgatus
 Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotidae; Aotus.
 REFERENCE
 AUTHORS
 TITLE
 JOURNAL
 REFERENCE
 AUTHORS
 TITLE
 JOURNAL
 FEATURES
 Submitted (02-FEB-2001) Pathology and Laboratory Medicine, Emory
 University School of Medicine, Winship Cancer Institute, 1365B
 Clifton Rd, Atlanta, GA 30322, USA
 Location/Qualifiers

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 QY 1507 ag 1508
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RESULT 15
AF344844
LOCUS
DEFINITION Callithrix jacchus CD154 protein mRNA, complete cds.
ACCESSION AF344844
VERSION AF344844.1 GI:13655474
KEYWORDS
SOURCE
ORGANISM
    white-tufted-ear marmoset.
    Callithrix jacchus
    Eumeryota; Metazoa; Chordata; Granulata; Vertebrata; Euteleostomi;
    Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae;
    Callitrix.
    1 (bases 1 to 975)
    Villinger, F., Bostik, P., Mayne, A.E., King, C.L., Genain, C.P.,
    Weiss, W.R. and Ansari, A.A.
    Cloning, sequencing and homology analysis of nonhuman primate
    Fas/Fas-ligand and co-stimulatory molecules
    Immunogenetics (2001) In press
    2 (bases 1 to 975)
    Villinger, F.
    Direct Submission
    Submitted (02-FEB-2001) Pathology and Laboratory Medicine, Emory
    University School of Medicine, Winship Cancer Institute, 1365B
    Clifton Rd, Atlanta, GA 30322, USA
    Location/Qualifiers
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Best Local Similarity 95.7%; Pred. No. 9e-158;
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    156 ATCTTCATAGAGGTGAGCAAGATAGAGATGAAGGAATCTTCATGAAGATTGTAT 215
QY 855 tcatgaaacgatacagagatgcacacacagagagaagaatcccttactcactgac 914
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QY 1095 actacacatgagcaacaacttgtaacctggaanaatgggaacacagctgacgttaaa 1154
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QY 1155 gacaagacttatatatcatatgcccagaatcaacctctgttccaatcgggaagcttoga 1214
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    516 GACAAGACTCTATTATATCTATATGCCCCAAGTCACTCTCTCCAAATCGGGAACCTTGA 575
QY 1215 gccaagctcattatagcagcctctgcccataagtcaccggttagatcagaagaatct 1274
    |||
    576 GTCAAGCTCTCAATTTATAGCCAGCTCTGCTTAAGCCCCCAATAGATTGAGAGAAATCT 635
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    756 GCCAAGTAGCCACGGCACCGGCTTACAGTCTTGGCTTACTCAAACTGTGAACAGTGG 815
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    816 AACAGTGTCACTTGACAGCTGTGTGTGAGCTGATGAGCTTCAATGATTAACACAGCAC 875
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Search completed: August 8, 2001, 05:54:20
Job time: 10509 sec

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: August 8, 2001, 04:42:23 ; Search time 145.09 seconds
(without alignments)
6716.544 Million cell updates/sec

Title: US-09-454-223-1
Perfect score: 1552
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Scoring table: IDENTITY_NUC
Gapop 10.0, Gapext 1.0

Total number of hits satisfying chosen parameters: 1460202

Minimum DB seq length: 0
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	720.2	46.4	879	AAF55539
2	710	45.7	1816	AA551745
3	681.2	43.9	840	AAV05763
4	681.2	43.9	840	AAV61063
5	679.6	43.8	840	AAQ57984
6	657.2	42.3	840	AAQ41506
7	657.2	42.3	840	AAQ67123
8	657.2	42.3	840	AAV93782
9	657.2	42.3	840	AAZ27525
10	654.2	42.2	840	AAV58122
11	652.4	42.0	840	AAQ94091

12	648.2	41.8	786	15	AAQ63959	Human CD40-L type
13	648.2	41.8	786	19	AAV38997	CD40 ligand gene u
14	648.2	41.8	786	19	AAV39000	Exemplary CD40 lig
15	648.2	41.8	786	19	AAV39002	Exemplary CD40 lig
16	648.2	41.8	786	19	AAV39003	Exemplary CD40 lig
17	648.2	41.8	786	19	AAV12852	CD40 ligand coding
18	638.6	41.1	1425	14	AAQ41516	Human CD40-L/FC fu
19	638.6	41.1	1425	20	AAZ27534	Human CD40-L/FC fu
20	638.2	41.1	929	18	AAV58123	CDNA encoding years
21	638.2	41.1	929	20	AAZ27537	Human trimeric CD4
22	589	38.0	783	19	AAV42184	Exemplary nucleotl
23	563.6	36.3	864	19	AAV39004	CD40 ligand gene u
24	521.8	33.6	885	21	AAZ55541	Feline CD154 CDNA
25	520.2	33.5	885	21	AAZ55540	Feline CD154 CDNA
26	502.8	32.4	1878	21	AAZ55534	Canine CD154 CDNA
27	502.8	32.4	1878	21	AAZ55535	Canine CD154 CDNA
28	498	32.1	780	21	AAZ55542	Feline CD154 CDNA
29	498	32.1	780	21	AAZ55543	Feline CD154 CDNA
30	492.6	31.7	633	21	AAZ55544	Feline mature CD15
31	492.6	31.7	633	21	AAZ55545	Feline mature CD15
32	474	30.5	780	21	AAZ55536	Canine CD154 CDNA
33	474	30.5	780	21	AAZ55537	Canine CD154 CDNA
34	468	30.2	633	21	AAZ55538	Canine mature CD15
35	468	30.2	633	21	AAZ55539	Canine mature CD15
36	462.8	29.8	818	19	AAV61062	Murine CD40 ligand
37	456.2	29.4	783	15	AAQ63960	Mouse CD40-L type
38	456.2	29.4	783	19	AAV12853	CD40 ligand coding
39	456.2	29.4	783	20	AAZ27524	Mouse CD40-L codin
40	456	29.4	606	19	AAV42183	Exemplary nucleotl
41	454.6	29.3	783	19	AAV38998	CD40 ligand gene u
42	454.6	29.3	783	19	AAV38999	Exemplary CD40 lig
43	454.6	29.3	783	19	AAV39001	Exemplary CD40 lig
44	453.6	29.2	782	14	AAQ41507	Murine CD40-L DNA
45	447.6	28.8	878	20	AAZ27538	Mouse trimeric CD4

ALIGNMENTS

RESULT 1	
AAF55539	
ID	AAF55539 standard; DNA: 879 BP.
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AC	AAF55539;
XX	
DT	29-MAY-2001 (first entry)
XX	
DE	Nucleotide sequence of human gp39 protein, a CD40 ligand.
XX	
XX	gp39; CD40 ligand; osteoblast cell death; apoptosis; bone loss;
KW	osteoporosis; osteonecrosis; inflammatory arthritis; estrogen loss;
KW	ovariectomy; hysterectomy; lupus nephritis; Takayasu's arteritis;
KW	Megener's granulomatosis; nephritis; myositis; scleroderma;
KW	thrombocytopenia; asthma; lung disease; cancer; ss.
XX	
OS	Homo sapiens.
XX	
XX	
FH	Key
FT	22..807
FT	location/Qualifiers
FT	/*tag= a
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XX	
PN	W0200116180-A2.
XX	
XX	08-MAR-2001.
PD	
XX	
XX	24-AUG-2000; 2000WO-US23276.
PF	
XX	
XX	27-AUG-1999; 99US-0151250.
PR	
XX	
XX	(TEXAS) UNIV TEXAS SYSTEM.
PA	
XX	
XX	Abuja SS, Bonewald LF;
PI	

XX WPI: 2001-169007/17.
 DR P-PSDB: AAB67612.
 XX
 PT CD40 agonist containing composition, used to reduce bone cell death or
 PT apoptosis associated with osteoporosis, osteonecrosis and inflammatory
 PT arthritis -
 XX
 PS Disclosure: Page 113; 118pp; English.

XX The present sequence encodes a gp39 protein. It is a CD40 ligand.
 CC CD40 ligands are used for reducing osteoblast cell death or apoptosis,
 CC and for treating or preventing bone loss in animals, preferably humans,
 CC at risk of, or undergoing, bone loss. The bone loss is associated with
 CC osteoporosis, osteonecrosis, inflammatory arthritis, post-menopausal
 CC estrogen loss, sterogon loss due to ovariectomy, total hysterectomy,
 CC lupus nephritis, Takayasu's arteritis, Wegener's granulomatosis,
 CC anti-glomerular basement membrane nephritis, myositis, scleroderma,
 CC idiopathic autoimmune thrombocytopenia, asthma, a chronic obstructive
 CC lung disease, nephrotic/nephritic syndrome, or cancer. They may also be
 CC used to treat or prevent bone loss in a subject undergoing, or scheduled
 CC for, an organ or bone marrow transplant.

Sequence 879 BP; 274 A; 193 C; 190 G; 222 T; 0 other;

Query Match 46.4%; Score 720.2; DB 22; Length 879;
 Best Local Similarity 99.6%; Pred. No. 1.5e-188;
 Matches 722; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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 Db 155 atctctcatagaagctgtgacacagatagaagatgaaggaattctatgaagattttat 854
 OY 855 tcatgaacacagatagaagatgaacacacagagaagaagatctctatctactgaacttg 914
 Db 215 tcatgaacacagatagaagatgaacacacagagaagaagatctctatctactgaacttg 914
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 Db 275 aggaagattaaagcagcttggaagccttggaaggaatataatttaacaaagaagaga 974
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 Db 395 atgtcataagtgagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 394
 OY 1095 actacacatgagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 454
 Db 455 actacacatgagcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 454
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 OY 1215 gtcaagctcattatctatctatctatctatctatctatctatctatctatctatctat 574
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 Db 635 tactcagagctgcgaacaaatgacacagcttcgcgaacacacacacacacacacacacac 1334
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 Db 815 caacttcgagcgtgtgtgagcagcagcagcagcagcagcagcagcagcagcagcagc 874
 OY 1515 gccca 1519
 Db 875 gccca 879

RESULT 2

AA51745
 ID AA51745 standard: cDNA; 1816 BP.

AA51745;

31-OCT-2000 (first entry).

Human CD40 ligand cDNA.

CD40 ligand; CD40; T cell; T cell receptor; rearrangement; maturation;
 cell death inhibition; stress-induced; immunosuppressive; anti-thyroid;
 anti-inflammatory; anti-diabetic; anti-rheumatic; anti-anaemic;
 ophthalmological; anti-psoriatic; nephrotrophic; hepatotropic; vitruide;
 dermatological; cyostatic; ss.

Homo sapiens.

Key Location/Qualifiers
 CDS 40..825
 FT /tag= a
 FT /product= Human_CD40_ligand

WO200039283-A1;
 06-JUL-2000.

22-DEC-1999; 99WO-US30930.
 29-DEC-1998; 98US-0114106.

(UYVE-) UNIV VERMONT & STATE AGRIC COLLEGE.
 Newell MK, Wagner D, Newell E;
 WPI: 2000-452387/39.
 P-PSDB: AAY96993.

Inducing T cell receptor gene rearrangement for treating autoimmune
 diseases comprises contacting T cells with a CD40-binding agent

Disclosure: Page 46; 50pp; English.

CD40 engagement on T cells can be used to induce T cell receptor
 rearrangement and enhance T cell affinity for a particular antigen. CD40
 engagement can be brought about by contacting CD40 with a CD40-binding
 agent, e.g. human CD40 ligand. The CD40-binding agents can also be used
 in methods for promoting T cell maturation. Inhibiting T cell receptor
 rearrangement, inhibiting environmental stress-induced cell death,
 altering the specificity of a T cell towards an antigen, inducing T cell
 reactivity towards an antigen or enhancing environmental stress-induced
 cell death (all claimed). T cell affinity maturation towards a specific
 antigen can be inhibited, especially for a self-antigen in an autoimmune
 disease, which includes rheumatoid arthritis, uveitis, insulin-dependent
 diabetes mellitus, hemolytic anaemias, rheumatic fever, Crohn's disease,
 Guillain-Barre syndrome, psoriasis, thyroiditis, Grave's disease,
 myasthenia gravis, glomerulonephritis, autoimmune hepatitis or systemic
 lupus erythematosus. Inducing environmental stress-induced T cell death
 is carried out in a cancerous T cell or a self-reactive T cell where the
 environmental stress is a chemotherapeutic agent (claimed).

Sequence 1816 BP; 520 A; 461 C; 343 G; 492 T; 0 other;

Query Match 45.7%; Score 710; DB 21; Length 1816;
Best Local Similarity 98.6%; Pred. No. 1.4e-185;
Matches 716; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

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DB 173 atctctatagaaggttgcgaagaatagaatgaagaatctctcatgaagatttgcac 232
OY 855 tcatgaagaacgatacagaatgcgaacagggagaaagatctctctactgaacgtcg 914
DB 233 tcatgaagaacgatacagaatgcgaacagggagaaagatctctctactgaacgtcg 292
OY 915 agggatataaagacaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 974
DB 293 agggatataaagacaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 352
OY 975 cgaagaaagaaacaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 1034
DB 353 cgaagaaagaaacaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 412
OY 1035 atgtcctatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 1094
DB 413 atgtcctatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 472
OY 1095 actacacatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 1154
DB 473 actacacatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 532
OY 1155 gacaaagacatctatatactatgcgaaggttgcgaaggtatcaatctcaacaaagaggga 1214
DB 533 gacaaagacatctatatactatgcgaaggttgcgaaggtatcaatctcaacaaagaggga 592
OY 1215 gtcaagctcattatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 1274
DB 593 gtcaagctcattatagaaggttgcgaaggttgcgaaggtatcaatctcaacaaagaggga 652
OY 1275 tactcagaagctcgaagaatgaagaatgaagaatgaagaatgaagaatgaagaatgaagaat 1334
DB 653 tactcagaagctcgaagaatgaagaatgaagaatgaagaatgaagaatgaagaatgaagaat 712
OY 1335 tgggaagaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1394
DB 713 tgggaagaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 772
OY 1395 gccaaagtgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1454
DB 773 gccaaagtgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 832
OY 1455 caacctgcagaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1514
DB 833 caacctgcagaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 892
OY 1515 gccccaa 1520
DB 893 gccccaa 898

RESULT 3

ID AAT05763 standard; DNA; 840 BP.

AC AAT05763;

DT 18-MAR-1996 (first entry)

DE Human CD40 ligand DNA.

XX High density membrane-bound CD40 ligand; B-lymphocyte; B-cell;

KW differentiation; proliferation; baculovirus; Spodoptera frugiperda;

OS Sf9; insect cell culture; tumour necrosis factor receptor; ss.

XX Homo sapiens.

XX Key Location/Qualifiers
FH CDS 22..807
FT /*tag= a

XX MO9529935-A1.

XX 09-NOV-1995.

XX 28-APR-1995; 95WO-US05448.

XX 28-APR-1994; 94US-0234580.

XX (BOEHR) BOEHRINGER INGELHEIM PHARM INC.

XX Castle BE, Kehry M;

XX WPI; 1995-393038/50.

XX P-PSDB: AAR85486.

PT High density membrane bound CD40 ligand - for stimulating the
PT proliferation of B cells in vitro or in vivo, partic. for producing
PT differentiated cells

PS Disclosure: Fig 1; 74pp; English.

CC The nucleotide sequence given in AAT05763 encodes a human high density,
CC membrane-bound (ndmp) CD40 ligand (AAR85486) that induces long-term
CC proliferation of B-cells in culture. These proliferating B-cells
CC can be induced to differentiate into antibody-prod. cells. The
CC nucleotide sequence is incorporated into a baculovirus vector that
CC is used to transfect Sf9 insect cells for prodn. of recombinant
CC hmbCD40.

XX Sequence 840 BP; 263 A; 182 C; 181 G; 214 T; 0 other;

Query Match 43.9%; Score 681.2; DB 16; Length 840;
Best Local Similarity 99.6%; Pred. No. 8.2e-178;
Matches 683; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 795 atggcctatagaaggttgcgaagaatagaatgaagaatctctcatgaagatttgcac 854
DB 155 atctctatagaaggttgcgaagaatagaatgaagaatctctcatgaagatttgcac 214
OY 855 tcatgaagaacgatacagaatgcgaacagggagaaagatctctctactgaacgtcg 914
DB 215 tcatgaagaacgatacagaatgcgaacagggagaaagatctctctactgaacgtcg 274
OY 915 agggatataaagacaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 974
DB 275 agggatataaagacaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 334
OY 975 cgaagaaagaaacaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1034
DB 335 cgaagaaagaaacaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 394
OY 1035 atgtcctatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1094
DB 395 atgtcctatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 454
OY 1095 actacacatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1154
DB 455 actacacatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 514
OY 1155 gacaaagacatctatatactatgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1214
DB 515 gacaaagacatctatatactatgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 574
OY 1215 gtcaagctcattatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 1274
DB 575 gtcaagctcattatagaaggttgcgaaggttgcgaaggttgcgaaggttgcgaaggttgcgaag 634

RESULT	4
AAV61063	
ID	AAV61063 standard; DNA; 840 BP.
XX	

Human CD40 ligand encoding DNA sequence.

Homo sapiens.

```

/*tag= a
/product= "CD40 ligand"

```

06-OCT-1958.

28-APR-1995; 95US-0431055.
28-APR-1994; 94US-0234580.

Castle B, Kehry M;

Increased proliferation of B cells in culture - by incubating them in the presence of membrane-bound CD40 ligand

The present sequence encodes human CD40 ligand which is used in the method of the invention. The method has been developed for proliferating B cells to increase their number at least 100-fold. The method comprises: (a) providing high density, membrane bound CD40 ligand; and culture results in a proliferation in the presence of this ligand. The 100 fold. Also described is a method as above where the B cells are induced to differentiate into antibody-producing cells in the presence of one or more cytokines. The method can be used for stimulating B-cell proliferation *in vitro* or *in vivo*, e.g. for treating conditions in which B-cell proliferation and activation is suppressed. Eight rounds of increase over six days can be achieved, corresponding to a 256-fold increase in cell numbers, which is a vast increase compared to previous culturing methods.


```

FT CDS 22..807
/*tag= a
XX EP585943-A.
XX
PD 09-MAR-1994.
XX
PF 03-SEP-1993; 93EP-0114153.
XX
PR 04-SEP-1992; 92US-0940605.
XX
PA (BRIM ) BRISTOL-MYERS SQUIBB CO.
PI Aruffo AA, Hollenbaugh D, Ledbetter JA, Aruffo A;
XX WPI; 1994-076264/10.
XX P-PSDB; AAR59548.
DR
PT New nucleic acid encoding human gp39 T cell antigen - which is a
ligand for the CD40 receptor, causing proliferation and
differentiation of B cells and some cancer cells
XX Claim 1; Fig 1; 39pp; English.
XX
XX The complete nucleic acid sequence of human gp39 (hgp39) protein
CC (corresp. to cDNA) and the complete AA sequence of hgp39 are
CC presented in AAO57964 and AAR59548 respectively and confd. In plasmid
CC CD8-hgp39, deposited with the ATCC as E. coli, CD8 MC1061/p3-hgp39
CC and assigned accession No. 69050. The human T cell antigen gp39 is a
CC ligand for the CD40 receptor. Soluble gp39 may be produced using the
CC expression vector CD8-gp39.
XX
SQ Sequence 840 BP; 263 A; 180 C; 183 G; 214 T; 0 other;

Query Match 43.8%; Score 679.6; DB 15; Length 840;
Best Local Similarity 99.4%; Pred. No. 2,3e-177;
Matches 682; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 795 atggcctatgaaggttgcgacagatagaaagaaatctcctcagaagatttctat 854
DB 155 atctcctatgaaggttgcgacagatagaaagaaatctcctcagaagatttctat 214
QY 855 tcatgaaagacatcacagatgcacaacagagaaagaaatctcctcactgactg 914
DB 215 tcatgaaagacatcacagatgcacaacagagaaagaaatctcctcactgactg 274
QY 915 agggatctaaagacagtttgaaggttcttgaagataataatgttaacaaagagga 974
DB 275 agggatctaaagacagtttgaaggttcttgaagataataatgttaacaaagagga 334
QY 975 gaaagaaagaaagacagtttgaaggttcttgaagataataatgttaacaaagagga 1034
DB 335 gaaagaaagaaagacagtttgaaggttcttgaagataataatgttaacaaagagga 394
QY 1035 atgtcctatgaaggttgcgacagatgaaacaaatctgtctacagctgggctgaaagaa 1094
DB 395 atgtcctatgaaggttgcgacagatgaaacaaatctgtctacagctgggctgaaagaa 454
QY 1095 actcaccatgagcaacaaatctgtctacagctgggctgaaagaaatctgaa 1154
DB 455 actcaccatgagcaacaaatctgtctacagctgggctgaaagaaatctgaa 514
QY 1155 gacaaagacatctatctatcttgcgacagctcctcttctcacaacggaagcttga 1214
DB 515 gacaaagacatctatctatcttgcgacagctcctcttctcacaacggaagcttga 574
QY 1215 gtcaagctcatttatacgaacccctgcctaaagtcaccggtagattcgaagaaact 1274
DB 575 gtcaagctcatttatacgaacccctgcctaaagtcaccggtagattcgaagaaact 634
QY 1275 tactcagaagctgcgaataaccacagttccgcaaaccttgcgggcaacaatccttca 1334

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DB 635 tactcagaagctgcgaataaccacagttccgcaaaccttgcgggcaacaatccttca 694
QY 1335 tgggagagagatatttgaaatgcacaacaggtctcgtgttgcataatgtaactcga 1394
DB 695 tgggagagagatatttgaaatgcacaacaggtctcgtgttgcataatgtaactcga 754
QY 1395 gccaaatgagccatgacagctcctcagctccttgccttactcacaacatcgaagctg 1454
DB 755 gccaaatgagccatgacagctcctcagctccttgccttactcacaacatcgaagctg 814
QY 1455 cactcttcagagctgtgtgtgagctga 1480
DB 815 cactcttcagagctgtgtgtgagctga 840

RESULT 6
AAO41506
ID AAO41506 standard; DNA; 840 BP.
XX
AC AAO41506;
XX
XX 12-AUG-1993 (first entry)
DE
XX CD40-L DNA.
XX
XX Human; CD40-L; CD40; type II; membrane; polypeptide; extracellular;
KW transmembrane; region; intracellular; soluble; activity; B cell;
KW proliferation; induction; antibody; secretion; IGE; agonist;
XX antagonist; binding assay; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 46..831
/*tag= a
XX
XX MO9308207-A.
XX
XX 29-APR-1993.
XX
XX 23-OCT-1992; 92MO-US08990.
XX
XX 25-OCT-1991; 91US-0783707.
XX
XX 05-DEC-1991; 91US-0805723.
XX
XX (IMMUNEX ) IMMUNEX CORP.
XX
PI Armitage RJ, Fanslow WC, Springs MK;
XX
XX WPI; 1993-152417/18.
XX
XX P-PSDB; AAR36701.
XX
PT New cytokine CD40-L as CD40 agonist and antagonist - is used for
PT treating allergies, lupus, rheumatoid arthritis,
PT graft-versus-host disease and insulin-dependent diabetes mellitus
XX
XX Claim 1; Fig 2; 80pp; English.
XX
XX This sequence encodes a human CD40-L polypeptide which binds to CD40.
XX CD40-L is a type II membrane polypeptide which has an extracellular
XX region at its C-terminus, a transmembrane region and an
XX intracellular region at its N-terminus. A soluble form of CD40-L
XX lacks the transmembrane domain. CD40-L activity is mediated by
XX binding with CD40 an dinduces B cell proliferation and induction of
XX antibody secretion, including IGE. Membrane bound CD40-L acts as a
XX CD40 agonist and soluble CD40-L acts as a CD40 antagonist. CD40-L
XX can be used in a binding assay to detect cells expressing CD40.
XX
SQ Sequence 840 BP; 266 A; 185 C; 175 G; 214 T; 0 other;

Query Match 42.3%; Score 657.2; DB 14; Length 840;
Best Local Similarity 99.5%; Pred. No. 3,4e-171;

```

Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 795 atggccatgaaggcttgagacagatagaagaatgaagaatctctacatgaatcttctgtat 854
Db 179 atctctatagaaggcttgagacagatagaagaatgaagaatctctacatgaatcttctgtat 854
QY 855 tcaagaaacagatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 238
Db 239 tcaagaaacagatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 238
QY 915 agggatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 298
Db 299 agggatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 298
QY 975 cgaagaaagaaacagcttgagacagatagaagaatctctacatgaatcttctgtat 358
Db 359 cgaagaaagaaacagcttgagacagatagaagaatctctacatgaatcttctgtat 358
QY 1035 atgtataagtgaggcagcagatagaagaatctctacatgaatcttctgtat 418
Db 419 atgtataagtgaggcagcagatagaagaatctctacatgaatcttctgtat 418
QY 1215 gtaagctcattatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 598
Db 599 gtaagctcattatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 598
QY 1275 tactcagagctgaagaatcagcagatagaagaatctctacatgaatcttctgtat 1334
Db 659 tactcagagctgaagaatcagcagatagaagaatctctacatgaatcttctgtat 1334
QY 1335 tggagagatctatgaatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 1394
Db 719 tggagagatctatgaatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 1394
QY 1395 gccagctgagcagatgaatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 1454
Db 779 gccagctgagcagatgaatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 1454
QY 1455 ca 1456
Db 839 ca 840

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AA067123
ID AA067123 standard; DNA; 840 BP.
AC AA067123:
XX 23-MAR-1995 (first entry)
XX CD40 ligand gene.
XX
XX Probe: primer; PCR; amplify; polymerase chain reaction; detection;
XX mutation; CD40 ligand gene; IGM, SS.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX CDS 46..831
XX /tag= a
XX /product= CD40 ligand
XX
XX MO9417196-A.

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PD 04-AUG-1994.
XX
XX 21-JAN-1994; 94MO-US00786.
PF
XX 22-JAN-1993; 93US-0009258.
PR
XX 20-JAN-1994; 94US-0184422.
PA (IMMUNEX CORP.
XX
XX Armitage RJ, Davison BL, Fanslow WC, Renshaw BR.
PI Spriggs MK, Wildner MB.
XX
XX WPI: 1994-264109/32.
DR P-PSDB: AAR57469.
XX
XX Method for detecting mutation in CD 40 ligand gene - comprises
PT amplification of nucleic acid, and mutational analysis
XX
XX Disclosure; Page 22-24; 38pp; English.
PS
XX
XX This sequence represents the CD40 ligand gene. Mutations within
CC this gene were identified by the method of the invention. The
CC method comprises isolating DNA from an individual and selectively
CC amplifying the isolated DNA derived from the CD40 ligand gene. The
CC amplification product is then analysed to determine if there is a
CC mutation present and determining if a protein expressed from the
CC ligand gene will bind CD40. The detection of mutations in the CD40
CC ligand gene allows subsequent treatment of a syndrome resulting in
CC isotypes, due to mutation in the CD40 ligand gene. ie. X-linked
CC hyperigm syndrome.
XX
XX Sequence 840 BP; 266 A; 185 C; 175 G; 214 T; 0 other;
SO

```

Query Match 42.3%; Score 657.2; DB 15; Length 840;
Best Local Similarity 99.5%; Pred. No. 3.4e-171;
Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 795 atggccatgaaggcttgagacagatagaagaatgaagaatctctacatgaatcttctgtat 854
Db 179 atctctatagaaggcttgagacagatagaagaatgaagaatctctacatgaatcttctgtat 854
QY 855 tcaagaaacagatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 238
Db 239 tcaagaaacagatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 238
QY 915 agggatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 298
Db 299 agggatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 298
QY 975 cgaagaaagaaacagcttgagacagatagaagaatctctacatgaatcttctgtat 358
Db 359 cgaagaaagaaacagcttgagacagatagaagaatctctacatgaatcttctgtat 358
QY 1035 atgtataagtgaggcagcagatagaagaatctctacatgaatcttctgtat 418
Db 419 atgtataagtgaggcagcagatagaagaatctctacatgaatcttctgtat 418
QY 1095 actacacatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 478
Db 479 actacacatgaagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 478
QY 1215 gtaagctcattatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 598
Db 599 gtaagctcattatagaaggcttgagacagatagaagaatctctacatgaatcttctgtat 598
QY 1275 tactcagagctgaagaatcagcagatagaagaatctctacatgaatcttctgtat 1334
Db 1334 tactcagagctgaagaatcagcagatagaagaatctctacatgaatcttctgtat 1334

```


PD 05-OCT-1999.
 XX
 PF 24-MAY-1994; 9405-0249189.
 XX
 PR 25-OCT-1991; 9105-0783707.
 PR 05-DEC-1991; 9105-0805723.
 PR 23-OCT-1992; 9205-0969703.
 XX
 PA (IMMUNEX) CORP.
 XX
 PI Spriggs MK, Fanslow WC, Armitage RJ;
 XX
 DR WPI: 1999-579604/49.
 DR P-PSDB: AAY39938.
 XX
 PS Anti-human CD40-Ligand monoclonal antibodies -
 XX
 PT Disclosure; Fig 2; 59pp; English.
 PS
 CC This sequence encodes the human CD40 receptor ligand (CD40-L). The
 CC invention relates to anti-human CD40-L monoclonal antibodies M90 secreted
 CC by hybridoma hCD40L-M90 (ATCC HB-12055) and M91 secreted by hybridoma
 CC hCD40L-M91 (ATCC HB-12056). M90 and M91 inhibit CD40-L binding to CD40
 CC and the ability of trimeric CD40-L and anti-Immunoglobulin M to induce
 CC proliferation of peripheral blood B cells.
 XX
 SQ Sequence 840 BP; 266 A; 185 C; 175 G; 214 T; 0 other;

Query Match 42.38; Score 657.2; DB 20; Length 840;
 Best Local Similarity 99.58; Pred. No. 3,46-171;
 Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggcctagaaaggttgacacagatagaagatgaagaatcctcattgaagatttgat 854
 DB 179 atctcctagaaaggttgacacagatagaagatgaagaatcctcattgaagatttgat 854
 QY 855 tcatgaaagatgacagagatgacacagagagaagatcctcattgaagatttgat 238
 DB 239 tcatgaaagatgacagagatgacacagagagaagatcctcattgaagatttgat 238
 QY 915 aggaagattaaagccagtttgaaagcttgtaagagataaaagttaaaacagaagaga 974
 DB 299 aggaagattaaagccagtttgaaagcttgtaagagataaaagttaaaacagaagaga 974
 QY 975 cgaagaaagaaacagcttgtaaaatgcaaaaggtgatcagaatcctcattgaagatttgat 1034
 DB 359 cgaagaaagaaacagcttgtaaaatgcaaaaggtgatcagaatcctcattgaagatttgat 1034
 QY 1035 atgtcataagtgagggccagcagtaaaacacatctgtgttaccagttggtgctgaaagagat 1094
 DB 419 atgtcataagtgagggccagcagtaaaacacatctgtgttaccagttggtgctgaaagagat 1094
 QY 1095 actacacatgagcacaacactgtgttaacccctggaaatggaacagctgacgcttaaa 1154
 DB 479 actacacatgagcacaacactgtgttaacccctggaaatggaacagctgacgcttaaa 1154
 QY 1155 gacaagagactctatatactatctcccaagccacccctctgttcccaatcggaagattcga 1214
 DB 539 gacaagagactctatatactatctcccaagccacccctctgttcccaatcggaagattcga 1214
 QY 1215 gtaagatcattatagccagcctcgcctaaagttcccccggatagattcgagaagatct 1274
 DB 599 gtaagatcattatagccagcctcgcctaaagttcccccggatagattcgagaagatct 1274
 QY 1275 tactcgaagctgaaataaccacagttccgcaaaccttcgggcaacaacatccctact 1334
 DB 659 tactcgaagctgaaataaccacagttccgcaaaccttcgggcaacaacatccctact 1334
 QY 1335 tgggagagattatgattgcaaacaggtgcttcggtgttgcattatgtgacatgacaa 1394
 DB 719 tgggagagattatgattgcaaacaggtgcttcggtgttgcattatgtgacatgacaa 1394
 XX 778

QY 1395 gccagtgagccatgacatgcttcacgtccttctgcttactcacaactgtgaacagttc 1454
 DB 779 gccagtgagccatgacatgacatgcttcacgtccttctgcttactcacaactgtgaacagttc 838
 QY 1455 ca 1456
 DB 839 ca 840

RESULT 10

AAT58122
 ID AAT58122 standard; cDNA; 840 BP.
 XX
 AC AAT58122;
 XX
 DT 19-SEP-1997 (first entry)
 XX

DE Human CD40L mutin coding sequence, with substitution at codon 194.
 KW CD40 ligand; membrane bound glycoprotein; B cell proliferation;
 XX antibody secretion; immunoglobulin E; cytokine; mutin; ss.
 OS Homo sapiens.
 XX
 FH Synthetic.
 XX

Key Location/Qualifiers
 FT CDS 46..831
 FT /tag= a
 FT /product= CD40L_mutin
 FT /note= "Encodes CD40L in which the Cys residue at
 FT position 194 is replaced by Trp, Ser, Asp
 FT or Lys"
 FT mutation 625..627
 FT /tag= b
 FT /note= "Wild-type TGC (Cys) codon is mutated to
 FT a codon for Trp, Ser, Asp or Lys"

MO9640918-A2.

19-DEC-1996.

06-JUN-1996; 96WO-US09632.

07-JUN-1995; 95US-0484624.
 07-JUN-1995; 95US-0477733.

(IMMUNEX) CORP.

Armitage RJ, Fanslow WC, Gibson MG, Spriggs MK;
 Strinivasan S;

WPI: 1997-052320/05.
 P-PSDB: AAM09113, AAM09114, AAM09115, AAM09116.

New CD40 ligand mutin with higher CD40 affinity than native ligand
 useful in binding assays, and for therapy of disorders and
 diseases involving low levels of B cells and antibody secretion

Claim 1; Page -: 31pp; English.

This sequence covers cDNA coding for human CD40L mutin polypeptides
 in which the wild-type Cys residue at position 194 has been
 replaced by a Trp, Ser, Asp or Lys residue. The mutins, designated
 C194W, C194S, C194D and C194K, are functional analogues of CD40L
 and as such are useful to induce B cell proliferation and antibody
 secretion. This property may be used to treat disorders associated
 with low levels of B cells or antibody secretion. The new CD40L
 mutins have a higher binding affinity for human CD40 than native
 CD40L and can be used in binding assays.
 (Note: The present sequence does not appear in the specification;
 it has been produced by modifying the wild-type coding sequence,
 which is given on pages 19-20, at codon 194).

Sequence 840 BP: 266 A; 184 C; 174 G; 213 T; 3 other:

Query Match 42.2%; Score 654.2; DB 18; Length 840;
 Best Local Similarity 99.1%; Pred. No. 2.2e-170;
 Matches 656; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 795 atgagcattgaaggttgcgaagaatgaagaatgaagaatctcattgaagatttggat 854
 DB 179 atctcatagaaggttgcgaagaatgaagaatgaagaatctcattgaagatttggat 238
 QY 855 tcatgaaacagatctacagagatgcacacagagaaatctctatcttactgactgtg 914
 DB 239 tcatgaaacagatctacagagatgcacacagagaaatctctatcttactgactgtg 298
 QY 915 aggaatttaaaagcaggtttgaaggtcttgtaaggaatataatttaaaacaaaggaga 974
 DB 299 aggaatttaaaagcaggtttgaaggtcttgtaaggaatataatttaaaacaaaggaga 358
 QY 975 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 1034
 DB 359 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 418
 QY 1035 atgtcataagtgaggcagcagtaaaacacacatctgttcaagtgaggctgaaagaat 1094
 DB 419 atgtcataagtgaggcagcagtaaaacacacatctgttcaagtgaggctgaaagaat 478
 QY 1095 actacacatgagcaaacactgtgttaacccctggaataatgggaacagctgaccttaaa 1154
 DB 479 actacacatgagcaaacactgtgttaacccctggaataatgggaacagctgaccttaaa 538
 QY 1155 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 1214
 DB 539 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 598
 QY 1215 gtaagctccattatagcagcctctgcctaaagtcaccccgtagattcgagaatct 1274
 DB 599 gtaagctccattatagcagcctctgcctaaagtcaccccgtagattcgagaatct 658
 QY 1275 tactaagagctgcacaaatcaccacagtcgcgcaaaccttgcgggcaacatccattact 1334
 DB 659 tactaagagctgcacaaatcaccacagtcgcgcaaaccttgcgggcaacatccattact 718
 QY 1335 tgggagagatatttgtaattgcacacaggtctcgtgtgttgcacatgtgactgacaa 1394
 DB 719 tgggagagatatttgtaattgcacacaggtctcgtgtgttgcacatgtgactgacaa 778
 QY 1395 gcaagatgaagcattgacgttgcacgtccttgccttgccttaaaacttcgaacagtg 1454
 DB 779 gcaagatgaagcattgacgttgcacgtccttgccttgccttaaaacttcgaacagtg 838
 QY 1455 ca 1456
 DB 839 ca 840

RESULT 11

AA094091
 ID AA094091 standard: cDNA; 840 BP.

XX AA094091;

XX 26-DEC-1995 (first entry)

XX Human CD40-L cDNA.

XX CD40 ligand; CD40-L; B-cell lymphoma; melanoma; carcinoma; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

XX CDS 46..831

FT /*tag= a

XX W09517202-A1.

XX 29-JUN-1995.

XX 21-DEC-1994; 94WO-US14767.

XX 23-DEC-1993; 93US-0172664.

XX (IMMUNEX CORP.

XX Armilange RJ, Fanslow WC, Longo DL, Murphy WJ;

XX WPI; 1995-240471/31.

XX P-PSDB; AAR76125.

XX Treating or preventing cancers where cells express CD40 - esp.

XX B-cell lymphoma, by treatment with a CD40 binding protein

XX Disclosure; Page 19-20; 34pp; English.

XX CD40-L is a type II membrane protein whose activity, mediated by
 binding of its extracellular region to CD40, includes B-cell
 proliferation and induction of antibody (including IgE) secretion.
 CC CD40-L/FC2 fusion protein, trimeric CD40-L (33-amino acid zipper,
 8-amino acid hydrophilic sequence and the extracellular region of
 CC CD40-L), and other forms of CD40-L can be produced by recombinant
 CC methods. CD40-L cDNA has been cloned from peripheral blood
 T-cells.

XX Sequence 840 BP: 266 A; 183 C; 176 G; 215 T; 0 other:

Query Match 42.0%; Score 652.4; DB 16; Length 840;
 Best Local Similarity 99.1%; Pred. No. 7e-170;
 Matches 656; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 795 atgagcattgaaggttgcgaagaatgaagaatgaagaatctcattgaagatttggat 854
 DB 179 atctcatagaaggttgcgaagaatgaagaatgaagaatctcattgaagatttggat 238
 QY 855 tcatgaaacagatctacagagatgcacacagagaaatctctatcttactgactgtg 914
 DB 239 tcatgaaacagatctacagagatgcacacagagaaatctctatcttactgactgtg 298
 QY 915 aggaatttaaaagcaggtttgaaggtcttgtaaggaatataatttaaaacaaaggaga 974
 DB 299 aggaatttaaaagcaggtttgaaggtcttgtaaggaatataatttaaaacaaaggaga 358
 QY 975 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 1034
 DB 359 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 418
 QY 1035 atgtcataagtgaggcagcagtaaaacacacatctgtgttcacgtgtggtgtaaaaggt 1094
 DB 419 atgtcataagtgaggcagcagtaaaacacacatctgtgttcacgtgtggtgtaaaaggt 478
 QY 1095 actacacatgagcaaacactgtgttaacccctggaataatgggaacagctgaccttaaa 1154
 DB 479 actacacatgagcaaacactgtgttaacccctggaataatgggaacagctgaccttaaa 538
 QY 1155 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 1214
 DB 539 gaaagaaagaaacagcttgaattgcacaaagtgatcagaatctcgaattgcgac 598
 QY 1215 gtaagctccattatagcagcctctgcctaaagtcaccccgtagattcgagaatct 1274
 DB 599 gtaagctccattatagcagcctctgcctaaagtcaccccgtagattcgagaatct 658
 QY 1275 tactaagagctgcacaaatcaccacagtcgcgcaaaccttgcgggcaacatccattact 1334
 DB 659 tactaagagctgcacaaatcaccacagtcgcgcaaaccttgcgggcaacatccattact 718

OY 1335 tggagagagatattgaattgcaaccaggctgctcgttctgttcaatgtagatcca 1394
 Db 719 tggagagagatattgaattgcaaccaggctgctcgttctgttcaatgtagatcca 1394
 OY 1395 gccaaagtgaacatgacacgacgcttcacgtctcttctgttcaatgtagatcca 1394
 Db 779 gccaaagtgaacatgacacgacgcttcacgtctcttctgttcaatgtagatcca 1394
 OY 1455 ca 1456
 Db 839 ca 840

RESULT 12

AA063959
 ID AA063959 standard; CDNA to mRNA; 786 BP.

AC AA063959;
 DT 11-JAN-1995 (first entry)

XX Human CD40-L type II transmembrane protein coding sequence.

XX Leucine zipper; trimerisation; trimeric CD40-L; fusion protein;
 KW hetero-oligomer; homo-oligomer; type II transmembrane protein;
 XX soluble CD40-L; tumour necrosis factor family; ss.

XX Homo sapiens.
 XX KEY Location/Qualifiers
 FT 1..786
 FT CDS

FT /product= human CD40-L;
 FT /note= "nucleotides 148-783 code for the
 FT extracellular region (amino acids 50-261)."

PN MO9410308-A.

PD 11-MAY-1994.

PF 20-OCT-1993; 93WO-US10034.

PR 23-OCT-1992; 92US-0969703.

PR 13-AUG-1993; 93US-0107353.

PA (IMMUNEX) IMMUNEX CORP.

PI Spriggs MK, Srinivasan S;
 PI WPI; 1994-167465/20.
 PI P-PSDB; AA353969.

PT Prepn. of soluble oligomeric mammalian proteins - using host
 PT cells to express a fusion protein comprising a leucine zipper
 PT domain and a heterologous mammalian protein

XX Example 1; Page 22-23; 35pp; English.

XX A DNA fragment encoding the extracellular (soluble) region of human
 CC CD40-L was ligated to a synthetic oligonucleotide sequence coding
 CC for a leader peptide, a 33 amino acid leucine zipper sequence
 CC (AA39368) and the Flag (RTM) linker sequence. Cells expressing the
 CC fusion construct are grown to accumulate oligomeric, soluble CD40-L
 CC trimers in supernatant. The leucine zipper sequence spontaneously
 CC trimerises in solution and fusion proteins comprising
 CC the sequence fused to a heterologous mammalian protein also form
 CC oligomers.

XX Sequence 785 BP; 250 A; 168 C; 168 G; 200 T; 0 other;

Query Match 41.8%; Score 648.2; DB 15; Length 786;
 Best Local Similarity 99.5%; Pred. No. 9.8e-169;

Matches 650; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 795 atggccatgaagaggttggacaagatagaaatgaagaatcttcagaaagatttgat 854
 Db 134 atcttcataagaggttggacaagatagaaatgaagaatcttcagaaagatttgat 193
 OY 855 tcatgaaacggttacagagatgcacaacagagagaaatcttcataagatttgat 914
 Db 194 tcatgaaacggttacagagatgcacaacagagagaaatcttcataagatttgat 253
 OY 915 aggaattaaagccaggttgaaggttgaaggttgaaggttgaaggttgaaggttga 974
 Db 254 aggaattaaagccaggttgaaggttgaaggttgaaggttgaaggttgaaggttga 313
 OY 975 cgaagaaagaaacagccttgaaatgcacaaagagatccttcataagatttgat 1034
 Db 314 cgaagaaagaaacagccttgaaatgcacaaagagatccttcataagatttgat 373
 OY 1035 atgtcataagtgagccagcagtaaacacacatctgttcaagtgaggtgaaagat 1094
 Db 374 atgtcataagtgagccagcagtaaacacacatctgttcaagtgaggtgaaagat 433
 OY 1095 actacacacagagcaacaacttgtaacccctggaacaaatgcagctgacgtttaa 1154
 Db 434 actacacacagagcaacaacttgtaacccctggaacaaatgcagctgacgtttaa 493
 OY 1155 gacaagagctctatatactatgccaagtcaccccttgcataatgcggaaagctga 1214
 Db 494 gacaagagctctatatactatgccaagtcaccccttgcataatgcggaaagctga 553
 OY 1215 gtcaagctcattatagcagcctctgcttaagtcacccctggaagatctga 1274
 Db 554 gtcaagctcattatagcagcctctgcttaagtcacccctggaagatctga 613
 OY 1275 tactcagagctgcaaatgccaagctcgcacaaacttgcgggcaacaatccatcact 1334
 Db 614 tactcagagctgcaaatgccaagctcgcacaaacttgcgggcaacaatccatcact 673
 OY 1335 tggagagagatattgaattgcaaccaggctgctcgttctgttcaatgtagatcca 1394
 Db 674 tggagagagatattgaattgcaaccaggctgctcgttctgttcaatgtagatcca 733
 OY 1395 gccaaagtgaacatgacacgacgcttcacgtctcttctgttcaatgtagatcca 1447
 Db 734 gccaaagtgaacatgacacgacgcttcacgtctcttctgttcaatgtagatcca 786

RESULT 13

AAV38997
 ID AAV38997 standard; DNA; 786 BP.

AC AAV38997;
 DT 23-SEP-1998 (first entry)

XX CD40 ligand gene used in the course of the invention.

XX CD40 ligand; alteration; immunoreactivity; human cell;
 KW accessory molecule ligand; AML; gene therapy; treatment; neoplasia;
 KW autoimmune disorder; rheumatoid arthritis; vaccine; ss.

OS Mus sp.

PN WO9826061-A2.

PD 18-JUN-1998.

PF 08-DEC-1997; 97WO-US22740.

PR 01-DEC-1997; 97US-0983272.

PR 09-DEC-1996; 96US-0032145.
 PA (REGC) UNIV CALIFORNIA.


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Db 314 cgaagaaagaaacagcttgaatgcaaaaggtgatcagaatccctaaatttgagcgc 373
OY 1035 atgcataaagtggagcagagtaaacacatctgtgtacagctggcctgaaagagat 1094
Db 374 atgtcataagtgaggcagagtaaacacatctgtgtacagctggcctgaaagagat 433
OY 1095 actacagccttgagcaaacacttgtaaccttggaanaattggaaacagctgacgttaaa 1154
Db 434 actacagccttgagcaaacacttgtaaccttggaanaattggaaacagctgacgttaaa 493
OY 1155 gacagagctctatatctatctatgcccagaagctcctctgttcccaatcgggaagcttga 1214
Db 494 gacagagctctatatctatctatgcccagaagctcctctgttcccaatcgggaagcttga 553
OY 1215 gtcaagctccattatagcagagcctctgcttaagtcgcccggtgagttgagaagatct 1274
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Db 674 tgggagagagatattggaatgcaacaggtgtgctggtgttgcgaatgtgactgaccaa 733
OY 1395 gccaaagtgaagcagctgctgctcagctccttgcttactactcaactctga 1447
Db 734 gccaaagtgaagcagctgctgctcagctccttgcttactactcaactctga 786

RESULT 15
AAV39002
ID AAV39002 standard: DNM: 786 BP.
AC AAV39002;
XX
XX 23-SEP-1998 (first entry)
XX
DE Exemplary CD40 ligand gene used in the course of the invention.
XX
KW CD40 ligand; alteration; immunoreactivity; human cell;
KW accessory molecule ligand; AML; gene therapy; treatment; neoplasia;
KW autoimmune disorder; rheumatoid arthritis; vaccine; chimera; ss.
XX
OS Chimeric - Mus sp.
OS Chimeric - Homo sapiens.
XX
XX MO9826061-A2.
XX
XX 18-JUN-1998.
XX
XX 08-DEC-1997; 97WO-US22740.
XX
XX 01-DEC-1997; 97US-0982272.
XX
XX 09-DEC-1996; 96US-0032145.
XX
XX (REGC) UNIV CALIFORNIA.
XX
XX Cantwell M, Klippes TJ, Sharma S;
XX
XX WPI: 1998-348521/30.
XX
XX
XX Vectors containing accessory molecule ligand genes - used for
XX altering immunoreactivity of cells, particularly for treatment of
XX neoplasia or autoimmune disorders, e.g. rheumatoid arthritis
XX
XX Disclosure: Page 106; 167pp; English.
XX
XX The present sequence represents an exemplary CD40 ligand gene,
XX comprising nucleotides encoding the extracellular domains (Domains III
XX and IV) and transmembrane domain (Domain II) of human CD40 ligand gene
XX

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CC (AAV38998) operatively linked to nucleotides encoding the cytoplasmic
CC domain (Domain I) of the murine CD40 ligand gene (AAV38997). The sequence
CC is used to exemplify the method of the invention. The specification
CC describes a method for altering the immunoreactivity of human cells which
CC comprises introducing a gene encoding an accessory molecule ligand (AML)
CC into the cells so that the AML is expressed on the surface of the cells.
CC Vectors containing the AML genes can be used in gene therapy for
CC treating neoplasia or autoimmune disorders such as rheumatoid arthritis.
CC They can also be used for vaccination to produce immunity against a virus
CC cell, bacteria, protein, fungus or neoplasia.
XX
XX Sequence 786 BP: 250 A; 166 C; 171 G; 199 T; 0 other;

```

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Query Match 41.8%; Score 648.2; DB 19; Length 786;
Best Local Similarity 99.5%; Pred. No. 9,8e-169;
Matches 650; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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OY 795 atggccatagaggttgagcaagatagagatgaaagatcttcaatgagaatctgtat 854
Db 134 atctcataagaggttgagcaagatagagatgaaagatcttcaatgagaatctgtat 193
OY 855 tcatgaaacagatcacagagatgcaacacagagagaagatccttacccttaccctgac 914
Db 194 tcatgaaacagatcacagagatgcaacacagagagaagatccttacccttaccctgac 253
OY 915 agagattaaagccagcttgaagcttctggaagatataatgttaacaagaagagaga 974
Db 254 agagattaaagccagcttgaagcttctggaagatataatgttaacaagaagagaga 313
OY 975 cgaagaaagaaacagcttgaagcttgaagcttgaagcttgaagcttgaagcttgaag 1034
Db 314 cgaagaaagaaacagcttgaagcttgaagcttgaagcttgaagcttgaagcttgaag 373
OY 1035 atgtcataagtgagcagagatgaaacacatctgttaccagctggtgctgaaagagat 1094
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OY 1095 actacacacagcagcaaacacttgtaaccttggaanaattggaaacagctgacgttaaa 1154
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OY 1215 gtcaagctccattatagcagagcctctgcttaagtcgcccggtgagttgagaagatct 1274
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OY 1335 tgggagagagatattggaatgcaacaggtgtgctggtgttgcgaatgtgactgaccaa 1394
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OY 1395 gccaaagtgaagcagctgctgctcagctccttgcttactactcaactctga 1447
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Search completed: August 8, 2001, 05:59:53
Job time: 4650 sec

GenCore version 4.5
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OM nucleic - nucleic search, using SW model

Run on: August 8, 2001, 02:54:36 ; Search time 86.11 Seconds
(Without alignments)
3412.041 Million cell updates/sec

Title: US-09-454-223-1
Perfect score: 1552
Sequence: 1 gctagcgaattccaccagga.....agggcatgtgactgtgtac 1552

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

ched: 324599 seqs, 94655562 residues

Total number of hits satisfying chosen parameters: 649198

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents, NA: *
1: /cgml_7/ptodata/1/lna/5A_COMB.seq: *
2: /cgml_7/ptodata/1/lna/5B_COMB.seq: *
3: /cgml_7/ptodata/1/lna/5A_COMB.seq: *
4: /cgml_7/ptodata/1/lna/5B_COMB.seq: *
5: /cgml_7/ptodata/1/lna/PCTUS_COMB.seq: *
6: /cgml_7/ptodata/1/lna/Backfileseq1.seq: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	681.2	43.9	840	1	US-07-940-605A-1
2	681.2	43.9	840	1	US-08-431-055-3
3	681.2	43.9	840	1	US-08-690-096-1
4	657.2	42.3	840	1	US-08-184-422-7
5	657.2	42.3	840	1	US-08-360-923A-1
6	657.2	42.3	840	2	US-08-249-189-11
7	657.2	42.3	840	2	US-08-484-624A-11
8	657.2	42.3	840	2	US-08-477-733B-11
9	657.2	42.3	840	3	US-08-763-995-1
10	657.2	42.3	840	3	US-09-088-913A-11
11	657.2	42.3	840	3	US-08-589-771B-7
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13	648.2	41.8	786	5	PCT-US93-10034-3
14	638.6	41.1	1425	2	US-08-249-189-15
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23	462.8	29.6	818	1	US-08-431-055-1
24	456.2	29.4	783	1	US-08-446-922-5
25	456.2	29.4	783	2	US-08-249-189-1
26	456.2	29.4	783	2	US-08-484-624A-1
27	456.2	29.4	783	2	US-08-477-733B-1

28	456.2	29.4	783	3	US-09-088-913A-1	Sequence 1, Appl1
29	456.2	29.4	783	5	PCT-US93-10034-5	Sequence 5, Appl1
30	447.6	28.8	878	2	US-08-249-189-22	Sequence 22, Appl1
31	447.6	28.8	878	2	US-08-484-624A-22	Sequence 22, Appl1
32	447.6	28.8	878	2	US-08-477-733B-22	Sequence 22, Appl1
33	447.6	28.8	878	2	US-09-088-913A-22	Sequence 22, Appl1
34	186.6	12.0	325	5	PCT-US92-09955-14	Sequence 14, Appl1
35	168.6	10.9	325	5	PCT-US92-09955-13	Sequence 13, Appl1
36	129.2	8.3	1868	1	US-08-392-367B-1	Sequence 1, Appl1
37	129.2	8.3	1868	3	US-08-893-467A-1	Sequence 1, Appl1
38	124	8.0	3181	1	US-08-655-086-1	Sequence 1, Appl1
39	119.2	7.7	1881	4	US-09-029-348-20	Sequence 20, Appl1
40	117.2	7.6	756	1	US-08-642-255-50	Sequence 50, Appl1
41	116.6	7.5	1560	2	US-08-794-795-5	Sequence 5, Appl1
42	116.6	7.5	1560	4	US-09-249-200-5	Sequence 5, Appl1
43	116.6	7.5	1703	2	US-08-794-795-1	Sequence 1, Appl1
44	116.6	7.5	1703	4	US-09-249-200-1	Sequence 1, Appl1
45	105.6	6.8	810	1	US-08-642-255-60	Sequence 60, Appl1

ALIGNMENTS

RESULT 1
US-07-940-605A-1
Sequence 1, Application US/07940605A
Patent No. 5540926
GENERAL INFORMATION:
APPLICANT: ARUFFO, ALEJANDRO
APPLICANT: HOLLENBAUGH, DIANE
APPLICANT: LEDBETTER, JEFFREY A.
TITLE OF INVENTION: SOLUBLE LIGANDS FOR CD40
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/940,605A
FILING DATE: 04-SEP-1992
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Mirock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 5624-184
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
TELEFAX: 212 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 840 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 22..807
US-07-940-605A-1

Query Match 43.9%; Score 681.2; DB 1; Length 840;
Best Local Similarity 99.6%; Pred. No. 8.5e-178;
Matches 683; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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?
? FILING DATE: 28-APR-1995
?
? CLASSIFICATION: 435
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/234,580
? FILING DATE: 28-APR-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: MILIMAN, ROBERT A
? REGISTRATION NUMBER: 36,217
? REFERENCE/DOCKET NUMBER: 1011,1030000/RAM
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (202)371-2540
? TELEFAX: (202)371-2540
? INFORMATION FOR SEQ ID NO: 3:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 840 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: both
? TOPOLOGY: linear
? MOLECULE TYPE: DNA
? FEATURE:
?
? NAME/KEY: CDS
?
? LOCATION: 22..807
?
? US-08-431-055-3

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Query Match	43.9%	Score 681.2	DB 1	Length 840:
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Db 155 ATCTTCATGACAGGTTGGACACAGATTAACAATGAAAGAACTTCATGATGATTTTGTAT	214			
QY 855 tcttgaacaacgtatcacagaatgcaacacagagaagaatcttcttctactgaactgtg	914			
Db 215 TCATGAAAACGATACAGAGATGCMACAGAGAAAGATCCTTATTCCTTACTGAACTGTG	274			
QY 915 aggaagattaaagccagcttggaaagctttgaaagatatcaatgttbaacaagaagaga	974			
Db 275 AGGAGATTAAAGCCAGTTTGAAGGCTTGTGAAAGATATAATGTTAAACAAACAGAGA	334			
QY 975 cgaagaagaanaacagacttggaaatgcataaagtgatcaagaatccatcaatctgcgcac	1034			
Db 335 CGAAACAAAGAAAACAGCTTTGAAATGCCAAAAGGTATAGATTCCTCAAAATTCGGCAC	394			
QY 1035 atgtcatatgaagagccagcaagtaaaacacatctgttcaagcttgagcttgtaaaagat	1094			
Db 395 ATGTCATGAAGGAGGCCAGCAGTAAACAAACATCTGTGTAAAGTGGCTGAAAAAGGAT	454			
QY 1095 acttcacacatgacacaacacttggtaacctggaaatgaggaaacagctgcaccgttaaa	1154			
Db 455 ACTACACCATGAGCAACACTTGGTAACCCCTGGAAAAATGGGAAACAGCTGACCGTTAAA	514			
QY 1155 gacaaagactatattatattatgcccgaagtcacacttctgttcaatctgggaagcttga	1214			
Db 515 GACAAAGACCTTATATATCTATGCCCCAAGTCACTTCTGTTCCAATGGGAAGCTTGA	574			
QY 1215 gtcaagctccatttatgcccagcctctgctctaaagtcgcccggtagatctgagaagaatct	1274			
Db 575 GTCAACCTCCATTATTAAGCCAGCCTTCGCCCTAAAGTCCCCCGGTAGATTCCAGAGAATCT	634			
QY 1275 tactcgaagctgcaaataccacacagtttcgcgccaaccttgcgggcaacaatccatcact	1334			
Db 635 TACTGAGACTGCAAAATACCACAGTTCGCCCAAACTTCGGGGCAACAAATCCATTCACT	694			
QY 1335 tgggaagagattatgaaatgcaacagagtgcttcggtgttggttgcgaatgtgaatccaa	1394			
Db 695 TGGGAGGAGTATTGAAATGCAACCAAGTGCTTCGGTGTGTTGCAATGTGACATGATCAA	754			
QY 1395 gccaaagtgaagcatggaactggtctcaagtccttggcttaactcaaaccttgaaagtggt	1454			
Db 755 GCCAAAGTAAAGCCATGAGCACTGGCTTACAGCTCTTTGGCTTACGCAAACTCTGAAACGATG	814			

QY 1455 caccttgacgctgtgtgtgagctga 1480
|||||
Db 815 CACCTTGACGCTGTGTGACACTGA 840

RESULT 3

US-08-690-096-1
Sequence 1, Application US/08690096
Patent No. 5945513
GENERAL INFORMATION:
APPLICANT: ARUFFO, ALEJANDRO
APPLICANT: HOLLENBAUGH, DIANE
APPLICANT: LEDBETTER, JEFFREY A.
TITLE OF INVENTION: SOLUBLE LIGANDS FOR CD40
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/690,096
FILING DATE: 31-JUL-1996
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/940,605
FILING DATE: 04-SEP-1992
ATTORNEY/AGENT INFORMATION:
NAME: MISROCK, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 5624-184
TELEPHONE: 212 790-9090
TELEFAX: 212 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 840 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
FEATURE:
NAME/KEY: CDS
LOCATION: 22..807
US-08-690-096-1

Query Match 43.9%; Score 681.2; DB 2; Length 840;
Best Local Similarity 99.6%; Pred. No. 8, 5e-178;
Matches 683; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggcatalaagagtgacgaagaatgaagaatcctcatalgaagatttgat 854
|||
Db 155 ATCTTCATAGAGGTTGGACAGATGAGATGAGATGAGATGAGATGAGATGAT 214
QY 855 tcaatgaagaatcagagatgacacacacaggaagaatcctcattactgaactgtg 914
|||
Db 215 TCATGAAACATACAGATGACACACAGGAGAAAGATCTTATCTTACTGACTGTG 274
QY 915 agagatcaaaagcagcttgagagcttgtagagatataatgtaaaacaaagagga 974
|||
Db 275 AGGAGATTAAAGCCAGTTTGAAGCTTTGTGACGATATATGTTAAACAAAGAGGA 334
QY 975 gaaagaaagaaacagcttgaaatgcaaaagtgatcagaaatcctcaaatctgcgac 1034
|||

Db 335 CGAAGAAAGAAACAGCTTTGAAATGCAAAAAGGTGATCAGATCCTCAATTTGCGGAC 394
QY 1035 atgtcataagtgagccagcaataaacaacatctgtgttacagtgaggctgaagaagat 1094
|||
Db 395 ATGTCATAGTAGGCGCAGCACTAAACAAACATCTGTGTACAGTGCGCTGAAAAAGAT 454
QY 1095 actacacacatgaacacacactgtgtacacccctggaataatgggaacagctgactaa 1154
|||
Db 455 ACTACACCATGAGCAACACTGTGAACCTGTGAAATGGGAAACACCTGACCTTTAAA 514
QY 1155 gacaagatctatattatctctgtgccaagtgacccctctgtccaatcggaagcttga 1214
|||
Db 515 GACAAGACTATATTATATCTATGCCCCAAGTCACTTCTGTTCCAAATCGGAACCTTGA 574
QY 1215 gtcaagctccattatagcaagcctctgtcctaagtcgcccggttagatctcgaagaatct 1274
|||
Db 575 GTCAAGCTCCATTTATAGCAACCTCTGCTTAAAGTCCCGGTAGATTGAGAGAAATCT 634
QY 1275 lactcagaagctgcaataaccacagctccgcaaacctctgaggaacaaatccatcact 1334
|||
Db 635 TACTCAGAGCTGCAATATACCAAGTCCGCCAAGCTTCCGGGACACATCCATTCCACT 694
QY 1335 tgggaagagatattgaaatgcaacagagtgctggtgtgttgtaaatgtgactgacaa 1394
|||
Db 695 TGGGAGAGATATTGAATTCGAACACAGGTGCTCGGTGTTGTCATGTGACTGATCCAA 754
QY 1395 gccaaatgagccatgagcactgtgtcactgctcttgcttactcacaactgaaacagt 1454
|||
Db 755 GCCAAGTGAGCCATGCGACTGCTTCACGCTTGTGGCTTACTCAAACTGGAACAGTGT 814
QY 1455 caccttgacgctgtgtgtgagctga 1480
|||||
Db 815 CACCTTGACGCTGTGTGACACTGA 840

RESULT 4
US-08-184-422-7
Sequence 7, Application US/08184422
Patent No. 5563121
GENERAL INFORMATION:
APPLICANT: ARMITAGE, RICHARD
APPLICANT: DAVISON, BARRY
APPLICANT: FANSLAW, WILLIAM
APPLICANT: RENSLOW, BLAIR
APPLICANT: SPRIGGS, MELANIE
APPLICANT: WIDMER, MICHAEL
TITLE OF INVENTION: DETECTION AND TREATMENT OF MUTATIONS
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: IMMUNEX CORPORATION
STREET: 51 UNIVERSITY STREET
CITY: SEATTLE
STATE: WASHINGTON
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple Operating System 7.1
SOFTWARE: MS Word for Apple 5.1, Version a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/184,422
FILING DATE: 800
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/009,258
FILING DATE: 01/22/93
ATTORNEY/AGENT INFORMATION:
NAME: PERKINS, PATRICIA ANNE
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2810-A
TELECOMMUNICATION INFORMATION:

TELEPHONE: 2065870430
 TELEFAX: 2065870606
 INFORMATION FOR SEQ ID NO: 7:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 840 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 HYPOTHEICAL: NO
 ANTI-SENSE: NO
 ORIGINAL SOURCE:
 ORGANISM: Homo sapiens
 IMMEDIATE SOURCE:
 CLONE: CD40-L
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 46..831
 US-08-184-422-7

Query Match 42.3%; Score 657.2; DB 1; Length 840;
 Local Similarity 99.5%; Pred. No. 3.3e-171;
 Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggccatagaaggttggaagaagatgaaagaatcttcataagatttgat 854
 DB 179 ATCTCATAGAGAGGTGGACAAAGATGAAAGATCTTCAATGAAATTTGTAT 238
 QY 855 tcatgaaacgatacagaatgcaacacaggaagaatccctacccctacgaactgtg 914
 DB 239 TCATGAAACGATACAGATGACAAACAGGAAAGATCCTTACTGAACTGTG 298
 QY 915 aggaatataaagcagttgaaagcttggaaagataataatgttaacaaagagaga 974
 DB 299 AGGAGATTAAAGCCATTTCAGCGCTTTGGAAGGATATATGTTAAACAAGAGAGA 358
 QY 975 cgaagaagaagaacagcttgaatgcaaaaggatgacatccctcaatttcggcac 1034
 DB 359 CGAAGAAAGAAACAGCTTTGAATGCAAAAGTGATCAAGATCCTCAAAATTCGCGCAC 418
 QY 1035 atgtcataagtgaggcagcagaagtaaaacacatctgtgtacagtgaggctgaagaaagat 1094
 DB 419 ATGTCAATAGTAGGCGCCAGCAGTAAACAACATCTGTGTACAGTGGCGCTGAAGAAAGAT 478
 QY 1095 actacacatgagcaacaacttggtaaccttgaaatggaaacagctgacgttaaaa 1154
 DB 479 ACTACACCATGAGCAACAACCTTGTAACCTGGAATGGGAACGCTGACCGTTAAAA 538
 QY 1155 gacaagactctatatctcttgcacaaagtaaccttcttccaaatcggaagcttga 1214
 DB 539 GACAAAGACTCTATATATATATATGATGCAAGTCAACCTTGTTCATCGGAAGCTTCCA 598
 QY 1215 gtcaagctcatttaagccagcccttgccttaagtcctcccggtgatcgagaatct 1274
 DB 599 GTCAAGCTCCATTATATACCGACCTCTCCCTTAAGTCCCGGTGATTCGAGAGATCT 658
 QY 1275 taactcagaatgcaaatcccaagttccgcaaaccttgcggcaacaatccatccact 1334
 DB 659 TACTCAAGAGCTGCAAAATACCCACAGTTCGCCAACCCTTGGGGGCAACAATCCATTCACT 718
 QY 1335 tgggaagagatattgtaattgcaaccaggttgcttggttgatgaatgtgactgacaa 1394
 DB 719 TGGGAGAGATATTGTAATTCGAACCAAGTGTGTTGTTGTCAAATGTGACTGATCAA 778
 QY 1395 gccaagtggaacatggaactggttcacgtctcttggcttaactaactcgaacagtgct 1454
 DB 779 GCCAAGAGACCATGCGACGTGCTCAGTCTTGGCTTACTCAAACTCTGAACAGTGT 838
 QY 1455 ca 1456
 DB 839 CA 840

RESULT 5

US-08-360-923A-1
 Sequence 1, Application US/08360923A
 Patent No. 5674492
 GENERAL INFORMATION:
 APPLICANT: ARMITAGE, RICHARD
 APPLICANT: FANSLAW, WILLIAM
 APPLICANT: LONGO, DAN L.
 APPLICANT: MORPHY, WILLIAM
 TITLE OF INVENTION: METHOD OF PREVENTING OR TREATING
 TITLE OF INVENTION: DISEASE CHARACTERIZED BY NEOPLASTIC CELLS
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: IMUNEX CORPORATION
 STREET: 51 UNIVERSITY STREET
 CITY: SEATTLE
 STATE: WASHINGTON
 COUNTRY: USA
 ZIP: 98101
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: Macintosh
 OPERATING SYSTEM: Apple Macintosh System 7.1
 SOFTWARE: Microsoft Word for Macintosh, Version #5.1a
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/360,923A
 FILING DATE: December 21, 1994
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: USSN 08/172,664
 FILING DATE: December 23, 1993
 CLASSIFICATION: 424
 ATTORNEY/AGENT INFORMATION:
 NAME: Perkins, Patricia A.
 REGISTRATION/DOCKET NUMBER: 34,693
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206)587-0430
 TELEFAX: (206)233-0644
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 840 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 HYPOTHEICAL: NO
 ANTI-SENSE: NO
 ORIGINAL SOURCE:
 ORGANISM: Homo sapiens
 IMMEDIATE SOURCE:
 CLONE: CD40-L
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 46..831
 US-08-360-923A-1

Query Match

Best Local Similarity 42.3%; Score 657.2; DB 1; Length 840;
 Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggccatagaaggttggaagaagatgaaagaatcttcataagatttgat 854
 DB 179 ATCTCATAGAGAGGTGGACAAAGATGAAAGATCTTCAATGAAATTTGTAT 238
 QY 855 tcatgaaacgatacagaatgcaacacaggaagaatccctacccctacgaactgtg 914
 DB 239 TCATGAAACGATACAGATGACAAACAGGAAAGATCCTTACTGAACTGTG 298
 QY 915 aggaatataaagcagttgaaagcttggaaagataataatgttaacaaagagaga 974

|||||
Db 299 AGGAGATTAAAGCAGCTTTGAGAGCTTTGTGAGAGATATATGTTAAACAAAGAGAGGA 358
Oy 975 cgaagaaagaaagacagcttctgaatgcgaagaaagtgatcagaatccctcaaatctgcgcac 1034
Db 359 CGAAGAAAGAAAGACGCTTTGAATGCAAAAAGGTATCAGATCCCAATTCGGGAC 418
Oy 1035 atgtcataagtgaggcgcagcgaatgaacaaacalcgtgtacagtgaggctgaaaaagat 1094
Db 419 ATGTCAATAGTACGAGCCGACAGTAAACAAATCTGTGTACAGTGCGGTGAAAAAGAT 478
Oy 1095 actaacacatgagagaaacacttggttaacccctgaaaaatgggaaacagctgaacgttaaa 1154
Db 479 ACTACACCATGAGCAACAACTTGTAACCTCGAAAAATGGAAAGCTGACCTTAAA 538
Oy 1155 gacaagagacttatatactatctgcccgaagtcacctctgtctcaactcgggaagcttcga 1214
Db 539 GACAAGACTCTATTATATCTATGTCACCAAGTCAACCTTGTTCAATCGGGAACCTTCGA 598
Oy 1215 gtcaagctcattatagcagcctctgtcctaaagtcgcccgtagatlcgaagaactc 1274
Db 599 GTCAAGCTCCATTATACCAAGCTCTGCTAAAGTCCCGGTAGATTGAGAGATCT 658
Oy 1275 tactcagaagctgcgaatcccaacagctccgcgaacacctctgcgggcaacaaatccatcact 1334
Db 659 TACTCAGAGCTGCAAAATACCAAGTCCGCCAAACCTTGCGGCAACAAATTCATTCACT 718
Oy 1335 tggaggagatgattgaaatgcgaacagtgctgcgggtgttgcgaatgagctgaatccaa 1394
Db 719 TGGAGAGAGTATTGAAATGCAACACAGGCTTCGCTGTTGTCAATGTGACTGATCAAA 778
Oy 1395 gccaaagtgagcagtgaggcctgtgtcgaagctcttggtctaccacaaacttgaaacagtg 1454
Db 779 GCCAAGAGAGCAGTACGAGCTGCTGACCTCTTGCGTACTCAAACTGAAACAGTGT 838
Oy 1455 ca 1456
Db 839 CA 840

RESULT 6
US-08-249-189-11
Sequence 11, Application US/08249189
Patent No. 5961974
GENERAL INFORMATION:
APPLICANT: ARMITAGE, RICHARD
APPLICANT: FANSLAW, WILLIAM
APPLICANT: SPRINGS, MELANIE
APPLICANT: SRINIVASAN, SUBHASHINI
APPLICANT: GIBSON, MARYLOU
TITLE OF INVENTION: NOVEL CYTOKINE
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: IMMUNEX CORPORATION
STREET: 51 UNIVERSITY STREET
CITY: SEATTLE
STATE: WASHINGTON
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple Operating System 7.1
SOFTWARE: Microsoft Word for Apple, version 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/249,189
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/969,703
FILING DATE: October 23, 1992
CLASSIFICATION: 514
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/805,723
FILING DATE: December 5, 1991
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/783,707
FILING DATE: October 25, 1991
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia A.
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2802-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: 2065870430
TELEFAX: 2065870606
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 840 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHEICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
IMMEDIATE SOURCE:
CLONE: CD40-L
FEATURE:
NAME/KEY: CDS
LOCATION: 46..831
US-08-249-189-11

Query Match 42.3%; Score 657.2; DB 2; Length 840;
Best Local Similarity 99.5%; Pred. No. 3.3e-171;
Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 795 atggccatagaaggttgagacagatagaaagaaagaaatcctcatgaagatttgat 854
Db 179 ATCTTCATAGAGGTTGGACAAGATGAAAGATCTTCAATGAAGATTGTAT 238
Oy 855 tcaatgaagatcagagatgcgaacagagaaagatcctcatcctgaagctg 914
Db 239 TCATGAAAGCATACAGGATGCAACACGAGAAAGATCTTATCTGACTGAATGTG 298
Oy 915 aggaatcaaaagcagcttgaaagctctgtgaagataaatgttaaaagaaagaga 974
Db 299 AGGAGATTAAAGCCAGTTTGAAGCTTTGTGAAGATATATGTTAAACAAAGAGGA 358
Oy 975 cgaagaaagaaagacagcttgaatgcgaagaaagtgatcagaatccctcaaatctgcgcac 1034
Db 359 CGAAGAAAGAAAGACGCTTTGAATGCAAAAAGGTATCAGATCCCAATTCGGGAC 418
Oy 1035 atgtcataagtgaggcgcagcgaatgaacaaacalcgtgtacagtgaggctgaaaaagat 1094
Db 419 ATGTCAATAGTACGAGCCGACAGTAAACAAATCTGTGTACAGTGCGGTGAAAAAGAT 478
Oy 1095 actaacacatgagagaaacacttggttaacccctgaaaaatgggaaacagctgaacgttaaa 1154
Db 479 ACTACACCATGAGCAACAACTTGTAACCTCGAAAAATGGAAAGCTGACCTTAAA 538
Oy 1155 gacaagagacttatatactatctgcccgaagtcacctctgtctcaactcgggaagcttcga 1214
Db 539 GACAAGACTCTATTATATCTATGTCACCAAGTCAACCTTGTTCAATCGGGAACCTTCGA 598
Oy 1215 gtcaagctcattatagcagcctctgtcctaaagtcgcccgtagatlcgaagaactc 1274
Db 599 GTCAAGCTCCATTATACCAAGCTCTGCTAAAGTCCCGGTAGATTGAGAGATCT 658
Oy 1275 tactcagaagctgcgaatcccaacagctccgcgaacacctctgcgggcaacaaatccatcact 1334
Db 659 TACTCAGAGCTGCAAAATACCAAGTCCGCCAAACCTTGCGGCAACAAATTCATTCACT 718

RESULT 8
US-08-477-733B-11
Sequence 11, Application US/08477733B
Patent No. 5981724
GENERAL INFORMATION:
APPLICANT: ARMITAGE, RICHARD
APPLICANT: FANSLON, WILLIAM
APPLICANT: SPRIGGS, MELANIE

APPLICANT: SRINIVASAN, SUBHASHINI
APPLICANT: GIBSON, MARYLOU
APPLICANT: MORRIS, ARVIA E.
APPLICANT: MCGREW, JEFFERY
TITLE OF INVENTION: NOVEL CYTOKINE THAT BINDS CD40
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: IMMUNEX CORPORATION
STREET: 51 UNIVERSITY STREET
CITY: SEATTLE
STATE: WASHINGTON
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: MS Word for Apple Power Macintosh, version 6.0.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,733B
FILING DATE: June 07, 1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/249,189
FILING DATE: May 24, 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/969,703
FILING DATE: October 23, 1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/805,723
FILING DATE: December 5, 1991
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/783,707
FILING DATE: October 25, 1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia A.
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2802-D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 2065870430
TELEFAX: 2065870606
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 840 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
IMMEDIATE SOURCE:
CLONE: CD40-L
FEATURE:
NAME/KEY: CDS
LOCATION: 46..831
US-08-477-733B-11

Query Match 42.3%; Score 657.2; DB 2: Length 840;
Best Local Similarity 99.5%; Pred. No. 3.3e-171;
Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggcctagaaggttgacacagatagaagaagaaatcttcacagaagatttgat 854
DB 179 ATCTTCAATAGAGCTTGGACAGATAGAGATGAAGAGATTTCATGAAAGATTTTGTAT 238
QY 855 tcattgaagaagatatacagatgcacacacagagagaagatcttactgaactgtg 914

|||||
DB 239 TCATGAAGAAGCATACAGATGCCAACACAGAGAAAGATCTTATCTTACTGAACTGTG 298
QY 915 agagattaaagccagcttgaggcttggaagataataagtgtaacaaagagaga 974
DB 299 AGGAGATTAAAGCCAGTTTGAAGCTTTGTGAAGCATATATGTTAAACAAAGAGGA 358
QY 975 cgaagaagaagaacagcttggaatgcaaaaagggtgatacagaatcctcaaatcgagac 1034
DB 359 CGAAGAAAGAAACAGCTTTGAAATGCAAAAAGTGATGAAATCCCAAAATTCGGCAC 418
QY 1035 atgtcataagtgaagccagcagataaacaacatctgtgtacagtggtgcgaaaaagat 1094
DB 419 ATGTCAATAGTGAAGCCAGCCAGCACTAAACAAATCTGTGTACAGTGGCTGMAAAGGAT 478
QY 1095 actacacatgaagcaaacactgtgtaacctggaataatggaaaacagctgacgtttaa 1154
DB 479 ACTACACCATGAGCAACACTGTGTAACCTGGAAATGGGAACACCTGACCTTAATA 538
QY 1155 gacaagacatctattatctatctgcccagtcacctctgttccaatcggagaagctcga 1214
DB 539 GACAAGACCTATTATATCTATGCCAAGTCACTTCTTCCAAATCGGAAGCTTGA 598
QY 1215 gtcaagctccattatagaacagcctctgctaaagtcctcccggtagattcgagaatct 1274
DB 599 GTCAAGCTCCATTATATAGCACTCTGCTTAAGTCCCGGTAGATTGAGAAATCT 658
QY 1275 tactcagaagctgcaaatcccaagctccgcaaaccttgagggaacaatcctcact 1334
DB 659 TACTCAGAGCTGCAAAATACCCACAGTTCGCCCAAACTTCGGGCAACAAATCCATTCACT 718
QY 1335 tggagagagatttgtaattgcaaacagtgctcgggtgtgttgtaaatgtaataatcga 1394
DB 719 TGGAGAGAGATTGTGAATTTGCAACAGGTGCTTGCGTTGTGTAATGTGACTAATCCAA 778
QY 1395 gccagatgaagcagatgcaatcagcttcacagcttccttgcttactcaaatcctgaaacagtg 1454
DB 779 GCCAAGTGAACCATGCGACTGCTGCTTCACTGCTTGTGCTTACTCAAACTGTGAACAGTGT 838
QY 1455 ca 1456
DB 839 CA 840

RESULT 9
US-08-763-995-1
Sequence 1, Application US/08763995
Patent No. 6017527
GENERAL INFORMATION:
APPLICANT: MARASKOVSKY, EUGENE
TITLE OF INVENTION: METHOD OF ACTIVATING DENDRITIC CELLS
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: IMMUNEX CORPORATION
STREET: 51 UNIVERSITY STREET
CITY: SEATTLE
STATE: WASHINGTON
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Power Macintosh 7200/90
OPERATING SYSTEM: Apple Operating System 7.5.5
SOFTWARE: Microsoft Word for Macintosh, version 6.0.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/763,995
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: USN 08/677,762
FILING DATE: 10 JUL 1996
ATTORNEY/AGENT INFORMATION:

Query Match 42.3%; Score 657.2; DB 3; Length 840;
 Best Local Similarity 99.5%; Pred. No. 3.3e-171;
 Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 795 atgagcagaagaggttgcagagatagagaatgaagaatctcattgaagatttctat 854
 |||
 DB 179 ATCTTCATAGAAAGTGTGACAAAGATAGAAAGATGAAGAAATCTTCATGAGTTTGTAT 238
 OY 855 tcatgaagaacgatacagaatagacagagagagagagagagagagagagagagagag 914
 |||
 DB 239 TCATGAAAACGATACAGATGCAACAGACAGAAAGATCTTCATCTTACTGAACTGTG 298
 OY 915 agagagattaaagagcaggttgcaggttgcaggttgcaggttgcaggttgcaggttgcag 974
 |||
 DB 299 AGGAGATTAAAGCCAGTTGAGGCTTGTGAGGATATATATGTTAAACAAAGAGAGGA 358
 OY 975 cgaagaaagaaagagcgttgcaggttgcaggttgcaggttgcaggttgcaggttgcag 1034
 |||
 DB 359 CGAAGAAAGAAAGAGCTTGAAGATGCAAGATGATCAGATCTTCATGAGTTTGTAT 418
 OY 1035 atgtcataagtgagagcagcagcagcagcagcagcagcagcagcagcagcagcagc 1094
 |||
 DB 419 ATGTCATAGTGAGGCGCAGCAGTAAACACATCTGTGTACAGTGGGCTGAAAAAGAT 478
 OY 1095 actacacacatgagcagaacacttggtacacctgagagagagagagagagagagagag 1154
 |||
 DB 479 ACTACACATGAGCAACAACTGTGTAACCTGTGAAATGGGAAACAGCTGACCGTTAAA 538
 OY 1155 gacaaagactcattatcattatcattatcattatcattatcattatcattatcattat 1214
 |||
 DB 539 GACAAAGACTCTATATATCTATGCCCCAAGTCACTTCTGTTCCAAATCGGAGACTTGA 598
 OY 1215 gtcaagctccattatagcagcagcagcagcagcagcagcagcagcagcagcagcag 1274
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 DB 599 GTCAAGCTCCATTATAGCAGCCTCTGCTTAAAGTCCCGGTAGATTCGAGAGATGT 658
 OY 1275 tactcagagctgcaaataccacagcttcgcagcaaaccttgcgggcaacaatccatcact 1334
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 DB 659 TACTCAGAGCTCAATATCCACAGATGTCGCCAAACCTTGGGCGCAAAATCCATTCAC 718
 OY 1335 tgggagggatatttgatattgcagcagcagcagcagcagcagcagcagcagcagcagc 1394
 |||
 DB 719 TGGGAGGAGTATTGTAATGCAACAGAGTCTTGGTGTGTGTCATGTCGATGCCAA 778
 OY 1395 gccaaagtgaagcagctgctgctgctgctgctgctgctgctgctgctgctgctgctgct 1454
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 DB 779 GCCAAGTGAAGCCATGCGCTGCTTCAAGTCTTGGCTTAACTGCAACAGTGT 838
 OY 1455 ca 1456
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 DB 839 CA 840

RESULT 11

US-08-589-771B-7
 ; Sequence 7, Application US/08589771B

Patent No. 6106832

GENERAL INFORMATION:

APPLICANT: ARMITAGE, RICHARD

APPLICANT: DAVISON, BARRY

APPLICANT: FANSLON, WILLIAM

APPLICANT: RENSAM, BLAIR

APPLICANT: SPRIGGS, MELANIE

APPLICANT: WIDMER, MICHAEL

TITLE OF INVENTION: TREATMENT OF INDIVIDUALS EXHIBITING

TITLE OF INVENTION: DEFECTIVE CD40L (as amended)

NUMBER OF SEQUENCES: 16

CORRESPONDENCE ADDRESS:

ADDRESSEE: IMMUNEX CORPORATION

STREET: 51 UNIVERSITY STREET

CITY: SEATTLE

STATE: WASHINGTON
 COUNTRY: USA
 ZIP: 98101
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: MS-DOS/Windows 95
 SOFTWARE: Word for Windows 95, 7.0a
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/589,771B
 FILING DATE: January 22, 1996
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/009,258
 FILING DATE: 01/23/93
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: HENRY, JANIS C.
 REGISTRATION NUMBER: 34,347
 REFERENCE/DOCKET NUMBER: 2810-C
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 2065870430
 TELEFAX: 2065870606
 INFORMATION FOR SEQ ID NO: 7:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 840 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 HYPOTHETICAL: NO
 ANTI-SENSE: NO
 ORIGINAL SOURCE:
 ORGANISM: Homo sapiens
 IMMEDIATE SOURCE:
 CLONE: CD40-L
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 46..831
 US-08-589-771B-7

Query Match 42.3%; Score 657.2; DB 3; Length 840;
 Best Local Similarity 99.5%; Pred. No. 3.3e-171;
 Matches 659; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 795 atgagcagaagaggttgcagagatagagaatgaagaatctcattgaagatttctat 854
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 DB 179 ATCTTCATAGAAAGTGTGACAAAGATAGAAAGATGAAGAAATCTTCATGAGTTTGTAT 238
 OY 855 tcatgaagaacgatacagaatagacagagagagagagagagagagagagagagagag 914
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 DB 239 TCATGAAAACGATACAGATGCAACAGAGAGAGAGATCTTCATGAGTTTGTAT 298
 OY 915 agagagattaaagagcaggttgcaggttgcaggttgcaggttgcaggttgcaggttgcag 974
 |||
 DB 299 AGGAGATTAAAGCCAGTTTGAAGGCTTGTGAGGATATATATGTTAAACAAAGAGAGA 358
 OY 975 cgaagaaagaaagagcgttgcaggttgcaggttgcaggttgcaggttgcaggttgcag 1034
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 DB 359 CGAAGAAAGAAAGAGCTTGAAGATGCAAGATGATCAGATCTTCATGAGTTTGTAT 418
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 DB 419 ATGTCATAGTGAGGCGCAGCAGTAAACACATCTGTGTACAGTGGGCTGAAAAAGAT 478
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 DB 479 ACTACACATGAGCAACAACTGTGTAACCTGTGAAATGGGAAACAGCTGACCGTTAAA 538
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 DB 539 GACAAAGACTCTATATATCTATGCCCCAAGTCACTTCTGTTCCAAATCGGAGACTTGA 598

QY 1215 gtcaagcttcattatagccagcctctgctcaaaagtcgcccgtagattcgaagaatct 1274
 Db 599 gtcaagcttcattatagccagcctctgctcaaaagtcgcccgtagattcgaagaatct 658
 QY 1275 tactcagaagctgcaaaataccacagcttcgcccaaacctctggcgcaacaatccattcact 1334
 Db 659 tactcagaagctgcaaaataccacagcttcgcccaaacctctggcgcaacaatccattcact 718
 QY 1335 tgggaagagatattggaattgcaaaccaagctgctcgtctgctgaatgctgctatccaa 1394
 Db 719 tgggaagagatattggaattgcaaaccaagctgctcgtctgctgaatgctgctatccaa 778
 QY 1395 gccaaagtgagccatggcagctgctcgtctgctgaatgctgctatccaa 1454
 Db 779 gccaaagtgagccatggcagctgctcgtctgctgaatgctgctatccaa 838
 QY 1455 ca 1456
 Db 839 ca 840

US-08-446-922-3
 ; Sequence 3, Application US/08446922
 ; Patent No. 5716805
 ; GENERAL INFORMATION:
 ; APPLICANT: Spriggs, Melanie
 ; APPLICANT: Srinivasan, Subhashini
 ; TITLE OF INVENTION: Methods of Preparing Soluble, Oligomeric
 ; NUMBER OF SEQUENCES: 11
 ; CORRESPONDENCE ADDRESS:
 ; STREET: 51 University Street
 ; CITY: Seattle
 ; STATE: WA
 ; COUNTRY: USA
 ; ZIP: 98101
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: Apple Macintosh
 ; SOFTWARE: Microsoft Word for Apple, Version 5.1a
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/446,922
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: USSN 08/107,353
 ; FILING DATE: 08-13-93
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Perkins, Patricia A
 ; REGISTRATION NUMBER: 34,693
 ; REFERENCE/DOCKET NUMBER: 1003-A
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (206)587-0430
 ; TELEFAX: (206)233-0644
 ; INFORMATION FOR SEQ ID NO: 3:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 786 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA to mRNA
 ; HYPOHETICAL: NO
 ; ANTI-SENSE: NO
 ; ORIGINAL SOURCE:
 ; ORGANISM: Human
 ; STRAIN: CD40-L
 ; FEATURE:
 ; NAME/KEY: CDS

LOCATION: 1..783
 US-08-446-922-3

Query Match 41.8%; Score 648.2; DB 1;
 Best Local Similarity 99.5%; Pred. No. 9, 5e-169;
 Matches 650; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 795 atggccatagaaggttggcgaagatagaagaatgaagaatctcattgaagatttgat 854
 Db 134 atcttcattaggaaggttgacaaagattgaagatgaagaaatcttcattgaagatttgat 193
 QY 855 tcatgaaaacgaatacagaagatgcacacagagaagaatccattatccattacgaactgtg 914
 Db 194 tcataaaacgattacagagatccaaacacaggaagaaagatccttattacgaaactgtg 253
 QY 915 aggaattaaaagccagcttggaagcttggaagataataatgtaaacaaagagaga 974
 Db 254 aggaattaaaagccagcttggaagcttggaagataataatgtaaacaaagagaga 313
 QY 975 cgaagaagaacacagcttgaatgcaaaagtgatcagaatcccaaatctggcgac 1034
 Db 314 cgaagaagaacacagcttgaatgcaaaagtgatcagaatcccaaatctggcgac 373
 QY 1035 atgtcataagtgagcagcagatgaacacacatctgtgttacagtggtgtaaaagat 1094
 Db 374 atgtcataagtgagcagcagatgaacacacatctgtgttacagtggtgtaaaagat 433
 QY 1095 acctaccatgaagcacaacacttgtaaccttggaataatgggaacacagctgaataa 1154
 Db 434 acctaccatgaagcacaacacttgtaaccttggaataatgggaacacagctgaataa 493
 QY 1155 gacaaggaactatataatataatgccaagtcacactcttcccaatcgggaagctcga 1214
 Db 494 gacaaggaactatataatataatgccaagtcacactcttcccaatcgggaagctcga 553
 QY 1215 gtcaagcttcattatagccagcctctgctcaaaagtcgcccgtagattcgaagaatct 1274
 Db 554 gtcaagcttcattatagccagcctctgctcaaaagtcgcccgtagattcgaagaatct 613
 QY 1275 tactcagaagctgcaaaataccacagcttcgcccaaacctctggcgcaacaatccattcact 1334
 Db 614 tactcagaagctgcaaaataccacagcttcgcccaaacctctggcgcaacaatccattcact 673
 QY 1335 tgggaagagatattggaattgcaaaccaagctgctcgtctgctgaatgctgctatccaa 1394
 Db 674 tgggaagagatattggaattgcaaaccaagctgctcgtctgctgaatgctgctatccaa 733
 QY 1395 gccaaagtgagccatggcagctgctcgtctgctgaatgctgctatccaa 1447
 Db 734 gccaaagtgagccatggcagctgctcgtctgctgaatgctgctatccaa 786

RESULT 13
 PCT-US93-10034-3
 ; Sequence 3, Application PC/TUS9310034
 ; GENERAL INFORMATION:
 ; APPLICANT: Spriggs, Melanie
 ; APPLICANT: Srinivasan, Subhashini
 ; TITLE OF INVENTION: Methods of Preparing Soluble, Oligomeric
 ; NUMBER OF SEQUENCES: 8
 ; CORRESPONDENCE ADDRESS:
 ; STREET: 51 University Street
 ; CITY: Seattle
 ; STATE: WA
 ; COUNTRY: USA
 ; ZIP: 98101
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/10034
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia A
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 1003
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206)587-0430
TELEFAX: (206)233-0644
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 786 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Human
STRAIN: CD40-L
FEATURE:
NAME/KEY: CDS
LOCATION: 1..783
PCT-US93-10034-3

Query Match 41.8% Score 648.2: DB 5: Length 786;
Best Local Similarity 99.5% Pred No. 9.5e-169;
Matches 650: Conservative 0: Mismatches 3: Indels 0: Gaps 0:
QY 795 atggcatalaagaggtctggacaagatagaaagaaatctcattgaagattctgat 854
DB 134 ATCTTATAGAGGTTGGACAAGATAGAAAGAAATCTTCATGAAATTTTGAT 193
QY 855 tcatgaaagatagacagatgacacagagaaagaaatcccttaactgaactgtg 914
DB 194 TCATGAAAGCATACGAGATGCAACACAGAGAAAGATCCTTATCTTACTGAACTGTG 253
QY 915 agagagatlaaagcagatttgaaggtcttctgaagatataatglttaacaaagagaga 974
DB 254 AGGAGATTAAAGCCAGTTTGAAGCTTTGTGAAGATATAATGTTAAACAAAGAGGA 313
QY 975 cgaagaaagaaacagcttctgaatgcaaaagtgatcaagaaatcccaattgcgagac 1034
DB 314 CGAAGAAAGAAACAGCTTTGAAATGCANAAGGTATCAGAAATCCTCAAAATTCGGCAC 373
QY 1035 atgtcataagtgagccagcaagtaaaacacacatctgtttacagtgagctgaaagagat 1094
DB 374 ATGTCAATAGTGAGGCGCAGCAATAAACAACATCTGTACAGTGGGCTGAAAAAGAT 433
QY 1095 actacacacatgagcaaacactgtgtaaccctggaaaaatgggaaacagctgaacgttcaa 1154
DB 434 ACTACACCATGAGCAAACTGTGTAACCTCGAANAATGGAAACAGCTGACCTTAAAA 493
QY 1155 gacaaagacatctatctatctctatgcccagaagtcacactctgttccaacgggaagcttga 1214
DB 494 GACAAGAGACTTATATATATATATATGATGATGATGATGATGATGATGATGATGATGAT 553
QY 1215 gtcaagctcacttataagcagcctctgcttaagtcaccccggttagatctgaagaaatct 1274
DB 554 GTCAAGCTCCTTTAT 613
QY 1275 tactcaagctcgcacaaatcccaagcttccgcacaaaccttgcggcgcaacaaatccact 1334
DB 614 TACTCAGAGCTGCAAAATCCGACAGATGTCGGCAAACTTTCGGGCAACATTCATTCAGT 673
QY 1335 tggagagagatattgaattgcacacagtgctcggltgttctcaatgtgactgacccaa 1394
DB 674 TGGAGAGAGTATTGCAATTGCAACAGAGTGCTTGGGTGTTGTCATATGTGATGATCAAA 733

QY 1395 gccaaatgagcagatggcagcttgcagctcacttggcttactcacaactctga 1447
DB 734 GCCAAGTGAGCCATGCGACATGCTTCACGCTTGGCTTACTTCAAACTCTGA 786
RESULT 14
US-08-249-189-15
Sequence 15, Application US/08249189
Patent No. 5961974
GENERAL INFORMATION:
APPLICANT: ARMITAGE, RICHARD
APPLICANT: FANSLAW, WILLIAM
APPLICANT: SPRIGGS, MELANIE
APPLICANT: SRINIVASAN, SUBHASHINI
APPLICANT: GIBSON, MARYLOU
TITLE OF INVENTION: NOVEL CYTOKINE
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESSES:
ADDRESSEE: IMMUNEX CORPORATION
STREET: 51 UNIVERSITY STREET
CITY: SEATTLE
STATE: WASHINGTON
COUNTRY: USA
ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Apple Operating System 7.1
SOFTWARE: Microsoft Word for Apple, version 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/249,189
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/969,703
FILING DATE: October 23, 1992
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/805,723
FILING DATE: December 5, 1991
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/783,707
FILING DATE: October 25, 1991
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Perkins, Patricia A.
REGISTRATION NUMBER: 34,693
REFERENCE/DOCKET NUMBER: 2802-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: 2065870430
TELEFAX: 2065870606
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 1425 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA to mRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
IMMEDIATE SOURCE:
CLONE: Human CD40-L/FC2 (soluble CD40-L)
FEATURE:
NAME/KEY: CDS
LOCATION: 4..1422
FEATURE:
NAME/KEY: mat_peptide
LOCATION: 79..1422
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 4..78

Db 885 GAACCTGTGAGGAGATTAAAGCCAGTTGAAGCCTTTGTGAAGGATATTAATGTTAAACAA 944
OY 967 agagggagacgaaagaaagaaacagcttgcgaatgcgaagaaagtcagaaatcccaaat 1026
Db 945 AGAGGACAGCAGAGAAAGAAACAGCTTGAATGCAAAAAGGATCAGAAATCCTCAAT 1004
OY 1027 tgcggcacaatgcataaagtcgggacagaaataaacaacatctgtctacagtcggctga 1086
Db 1005 TCGGGCACATGTCTAAGTGAAGCCAGAGTAAGAACATCTGTGTACAGTGGCTGA 1064
OY 1087 aaaaagatctacacccatgcagaaacaacttggtaaccctgcgaaatgcgaaacagctgac 1146
Db 1065 AAAAGCATTAACACACAGACCAACACTGGTAACCTGGAAATGGGAAACAGCTGAC 1124
OY 1147 cgttaaaagcaagagacctaataatcctgcgaagtcgaagtcgcccgcgtaagatcga 1206
Db 1125 CGTTAAAGACAAAGACTCTATTATATCTATGCCCCAAGTCACCTCTGTTCAAATCGGA 1184
OY 1207 agcttcgagtcgaagctccattatagcagccttcgctcaagtcgcccgcgtaagatcga 1266
Db 1185 AGCTTCAGTCAAGCTCCATTTATAGCCAGCCTCTGCTAAAGTCCCCCGGTAGATTGGA 1244
OY 1267 gagaatcttactcagaagctgcgaatatacccaagcttcgcgaacacttcgcygcacaatc 1326
Db 1245 GAGAACTCTTACTCAGAGCTGCAAAATACCCAGTTCCGCCAAACCTTGCGGGCAACAATC 1304
OY 1327 catcacttcgggagagatattgaattgcacaacaggtgcctcgggtcttgcaatgtgac 1386
Db 1305 CATTCACCTGGGAGAGATTTGAATGCAACAGAGTCTCGGTGTGTGTCAATGTGAC 1364
OY 1387 tgatcgaagcaagtcgagccatgcgacatgcgcttcacgttccttcgttactcaaaccttg 1446
Db 1365 TGATCCAAAGCCAAAGTGAAGCATGGCACTGGCTTCAAGTCTTGGCTTACTCAAAACTCTG 1424
OY 1447 a 1447
Db 1425 A 1425

Search completed: August 8, 2001, 05:07:49
Job time: 7993 sec

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GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: August 8, 2001, 02:53:26 ; Search time 1594.91 Seconds
(without alignments)
9198.531 Million cell updates/sec

Title: US-09-454-223-1
Perfect score: 1552
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Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

chcd: 10228115 seqs, 4726426750 residues
Total number of hits satisfying chosen parameters: 20456230

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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255: gb_est186:*
256: gb_est187:*
257: gb_est188:*
258: gb_est189:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	763.2	49.2	846	154	BG518956 602577864
2	632	40.7	766	145	BF140515 601787532
3	622.2	40.1	752	145	BF181880 601805307
4	618	39.8	822	175	BG248049 602359984
5	603.8	38.9	739	144	BF101636 601753557
6	586.2	37.8	639	166	BE382093 601272253
7	553.2	35.6	571	166	BE336562 601086764
8	532.2	34.3	537	166	BE370239 601210777
9	528.4	34.0	530	175	BG243812 602357834
10	524.8	33.8	662	166	BE377673 601239816
11	479.8	30.9	980	174	BG176062 602355287
12	478.2	30.8	653	165	BE284648 601087626
13	453.6	29.2	570	166	BE308199 601091376
14	428	27.6	835	141	BE916416 601667002
15	378.6	24.4	665	154	BG482911 602502918
16	308	19.8	1121	141	BE916794 601664120
17	305	19.7	305	145	BF150077 uyl8e06.Y
18	288.6	18.6	680	173	BG085186 H3109E10-
19	267.4	17.2	642	13	AA880738 vx31a06.r
20	259.6	16.7	407	18	A1326642 m02a01.Y
21	258	16.6	375	2	AA096905 m02a01.r
22	245.2	15.8	492	151	BF599437 263218 MA
23	229	14.8	835	155	BG542824 602571588
24	223.2	14.4	677	155	BG537862 602565729
25	218.6	14.1	306	162	BB606038 BB606038
26	202.4	13.0	277	162	BB604454 BB604454
27	187.6	12.1	551	173	BG072353 H3109E10-
28	185.4	11.9	361	115	AW354680 36752 MAR
29	169.8	10.9	398	116	AW486605 75217 MAR
30	165.6	10.7	705	22	A1573415 m002a01.X
31	144	9.3	776	144	BF119140 601755433
32	144	9.3	2933	192	AK019448 Mus muscu
33	141.4	9.1	721	165	BE290460 601088534
34	136.2	8.8	731	150	BF535428 602051822
35	133.2	8.6	746	166	BE307855 601096339
36	132.6	8.5	943	144	BF124650 601757093
37	132	8.5	703	150	BF536157 602051693
38	131.8	8.5	802	145	BF181803 601805423
39	131.8	8.5	812	154	BF120252 601756176
40	131.8	8.5	960	154	BG519086 602578018
41	131.4	8.5	861	150	BF582296 602101124
42	129.6	8.4	630	165	BE289488 601087958
43	129.4	8.3	806	145	BF182298 601804065
44	128.6	8.3	644	179	AL547135 Homo sapi
45	128.4	8.3	1006	106	AL540874 AL540874

ALIGNMENTS

RESULT	1	ALIGNMENTS
LOCUS	BG518956	846 bp mRNA
DEFINITION	602577864F1 NCI-CGAP_Mam5 Mus musculus cDNA clone IMAGE:3481958 5', mRNA sequence.	02-APR-2001
ACCESSION	BG518956	
VERSION	BG518956.1	GI:13514332
KEYWORDS	EST.	
SOURCE	house mouse.	
ORGANISM	Mus musculus	
REFERENCE	1 (base 1 to 846)	
AUTHORS	NIH-MGC http://mgc.nci.nih.gov/	
TITLE	National Institutes of Health, Mammalian Gene Collection (MGC)	
JOURNAL	Unpublished (1999)	
COMMENT	Contact: Robert Strausberg, Ph.D.	

Email: cgarbs@mail.nih.gov
 Tissue Procurement: Lotmar Hennighausen Ph.D., Robin Humphreys
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
 Plate: LHAM8510 row: 0 column: 15
 High quality sequence stop: 845.
 Location/Qualifiers

FEATURES

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 /clone="IMAGE:3481958"
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 /tissue_type="tumor, gross tissue"
 /dev_stage="7 months"
 /lab_host="DH10B"
 /note="Organ: mammary; Vector: pCMV-SPORT6; Site: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dt. Library constructed by Life Technologies. Investigators providing samples: Lotmar Hennighausen/Robin Humphreys, NIH"

BASE COUNT 219 a 210 c 271 g 146 t

ORIGIN

Query Match 49.2% Score 763.2; DB 154; Length 846;
 Best Local Similarity 98.1% Pred. No. 5, 2e-203;
 Matches 793; Conservative 0; Mismatches 13; Indels 2; Gaps 2;

QY	14	accagaagcaatctgacatgctgcctctctcctcagtcgtctgtctgtacagcc	73
DB	1	ACAAAGAAACATCTGACATCTGCTTCTCTCATGCTTGTGCTTGTACAGCC	60
QY	74	ctgggaatctgggaagcaatgaaagcctctgcagagatcagtaaccaacctgc	133
DB	61	CTGGGAATCTGGGAGCAAGAAATGAGACCTCTCGAGATCAGAACCAACCTGC	120
QY	134	acctatgcatgtgagcccaagaaatgctgctgtgctgtgctgtgctgtgctgt	193
DB	121	ACCTATGATCTGTATGACCAACAGAAATGCTGCTGCTGCTGCTGCTGCTGCTG	180
QY	194	agaagaagctcagaggggtgagaaggtgacaggtctgcagagacatagggctcca	253
DB	181	AGAGAAAGTCCAGCGGGTGAAGAGGTGATCCAGTTTCCAGAGACCTATGGCTTCA	240
QY	254	gggttcagggccctcaggtccaggttgcacccaagaaagaaatggtctgtgcgaa	313
DB	241	GGGTTCAGGGCCCTTACAGCTCCAGTTGACCCAAAGAGAGAAATGCTGCGGCA	300
QY	314	cctggaccagaaggaagcgtgactaagtgtgacctccaggaactccaagatcctgt	373
DB	301	CCTGGACCAAGGAGAGAGCTGACTTACCTCCAGACTTCCAGACTTCCAGACTT	360
QY	374	ccagctggaaagaaaggtccctctggaagcaggggaacaataggacctcaaggaaca	433
DB	361	CCAGCTGGAAAGAAAGGTCTCTCTGGAGAGCAGGGAACTATGAGACCTCAAGGCA	420
QY	434	gttcctaaagagagagcgtgggtcccaaggaagtagtgcctcctgtgcatcaaggaact	493
DB	421	GTTCTTAAAGAGAGAGGCTGGGCTCAAGAGAAAGTAGTGTCTCTGCGATCCAGAGACT	480
QY	494	acagggcacaagagctccacagagcccaaggggaagaaaggtgcccctgtgtgcagga	553
DB	481	ACAGGCGCAAAAGCTCCACAGAGCCCAAGGAGAAAGAGAGTGGCTGCTGCTCAAGGA	540
QY	554	gcccaaggaatgctgtgagcagcaggaacctgcgagacctgcggttccacagggactcca	613
DB	541	GCCCCAGGAGATGCTGGAGACAGAGACCTGCGGACTTCCGCTCCAGAGGAGACTCA	600

QY 614 gttccagggg -ccccagactcaaggaggagagagagagagagagat 672
 DB 601 GGTTCACAGGGGGCCCCAGAGCTCAAGGGAGACAGAGGTCTTCTGGAGACAGAGAT 660
 QY 673 caaaggagaaagcggttcacagacagtgctgctcagagagacagatgagagcctaa 732
 DB 661 CAAAGGTGAAGCGGGCTTCACAGAGTGTCTGAGCAGCAGATGAGAGCCTTAA 720
 QY 733 aggaactacagcgtctagagtgctcctcctccacatcag-aaagctcatgtcc 791
 DB 721 AGGAACATCAACCGTCTAGAGTGTCTCTCCACTATCAGAAAGCTCATGTCTCC 780
 QY 792 ctgattgacataagagtgtagaagt 819
 DB 781 CTGATGGCCGAAGCTTGGAGCAAGAT 808

RESULT 2

LOCUS Bf140515 766 bp mRNA EST 24-OCT-2000
 DEFINITION 601787532P1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:4015350 5',
 mRNA sequence.
 Bf140515

VERSION Bf140515.1 GI:10979542
 KEYWORDS EST.
 SOURCE house mouse.
 ORGANISM Mus musculus.

REFERENCE Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:
 Mammalia: Eutheria: Rodentia: Sciurognathi: Muridae: Murinae: Mus.
 NIH-MGC http://mgi.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgabs-remail.nih.gov
 Tissue Procurement: Gilbert Smith, Ph.D.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: NCI-CGAP clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LHAM9260 row: p column: 07

FEATURES
 Source High quality sequence stop: 745.
 Location/Qualifiers
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/organism="Mus musculus"
 /strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone_image="4015350"
 /clone_lib="NCI_CGAP_Lu30"
 /tissue_type="tumor, metastatic to mammary"
 /lab_host="DH10B"
 /note="Organ: Lung; Vector: pCMV-Sport6; Site: 1; NotI;
 Site: 2; SalI; transgenic model WNT-1, expression driven by
 MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo
 dT. Library constructed by Life Technologies.
 Investigator providing samples: Gilbert Smith, NIH"
 BASE COUNT 190 a 186 c 254 g 136 t
 ORIGIN

Query Match 40.7% Score 632 DB 145 Length 766
 Best Local Similarity 97.0% Pred. No. 3.4e-166
 Matches 708; Conservative 0; Mismatches 15; Indels 7; Gaps 6;
 QY 17 aggaagaaactacacagtcgtccttcctccatgctgtgctgtgtagagagagagagat 76
 DB 2 AGGAAGAAATCTCGCATGCTCCCTTCTCTCCATGCTGTGCTGTGTACAGCCCTG 61
 QY 77 ggaagaaactacagcgtctagagtgctcctcctccacatcag-aaagctcatgtcc 791
 DB 62 GGAAGAAATCTCGCATGCTCCCTTCTCTCCATGCTGTGCTGTGTACAGCCCTG 61
 62 GGAAGAAATCTCGCATGCTCCCTTCTCTCCATGCTGTGCTGTGTACAGCCCTG 121

QY 137 ctgattatgtatgagcccaacagagaaatgctgctgctgctgtagatgagagagagat 196
 DB 122 CTGATGATGTGTATGAGCCCGACAGAGAAATGGCTGCTGCTGTGTATGAGAGGAGAG 181
 QY 197 gaaagtcacagcggtatgagagaggtatgatacaggtttcagagacatagtgagcctcag 256
 DB 182 GAAGGTCCACGGGGTATGAGAGGGGTATGACAGGTTTGCACAGACTATGAGGCTCTAGGG 241
 QY 257 ttgcagggcctcactaaggtccaggttgagcccaagagagatgagctgtgtgagagact 316
 DB 242 TTGCAGGGCCCTTACAGGTCCAGTTGACCCCAAGAGAGATGCTGTGTGCTGCAACT 301
 QY 317 ggaacaaaggagaaacgtgtgactaagtgagagctcagagacttcacagatctccctgag 376
 DB 302 GGACCAAGGAGAGAGAGGAGTGAATGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 361
 QY 377 gctgggaaagaaaggtlccctctggaagcaggggagacat-aggacctcaagcagacag 435
 DB 362 GCTGGGAAGAAAGCTCCCTCTGGAGCAGGGGAACATTAAGACCTCAAGGCAACACAG 421
 QY 436 tccataagagagagctggtgcccacaaagagagagagagagagagagagagagagag 495
 DB 422 TCTTAAGAGAGAGGCTGGG-CCAAAGAGAGAGTACGTCTCTGCAATCCAGATCTAC 480
 QY 496 aggggcaaaaggtcccaagggcccaagggagagagagagagagagagagagagagag 555
 DB 481 AGGGGCAAAAGGCTCCACAGGCCCCCAAGGAGACAGAGTCTCTGCTGTGCAAGAGAG 540
 QY 556 cccaaggaatgctgtagaagcagagagagagagagagagagagagagagagagagagag 615
 DB 541 CCCAGGAAGTGTGGGGGAG-AGGACTGTGTGACCTGTGCTGCTGCTGCTGCTGCTGCT 599
 QY 616 ttccagggggcccccag 675
 DB 600 TTCCAGGGGGCCCCAGAGACTC-AGGGGAGACAGAGGTCTCTGAGACAGAGATCA 658
 QY 676 aggtgaaag 735
 DB 656 AGGTGACAGCGGGCTTCAGACAGTG-TGCTGTGAGCGACAGAGTG--GGCCTTAAGG 715
 QY 736 aaactacag 745
 DB 716 AAAGTACAG 725

RESULT 3

Bf181880 752 bp mRNA EST 31-OCT-2000
 LOCUS 601805307P1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:4036393 5',
 mRNA sequence.
 Bf181880

ACCESSION Bf181880.1 GI:11060022
 VERSION Bf181880
 KEYWORDS EST.
 SOURCE house mouse.
 ORGANISM Mus musculus.

REFERENCE Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi:
 Mammalia: Eutheria: Rodentia: Sciurognathi: Muridae: Murinae: Mus.
 NIH-MGC http://mgi.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgabs-remail.nih.gov

Tissue Procurement: Lohar Hennighausen Ph.D., Robin Humphreys
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LHAM9311 row: m column: 02
 High quality sequence stop: 673.


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Db 313 AACCTGACCAAGGAGAAAGCTGACTTAAGTACCTCCAGACTTCCAGGATATTCCTG 372
Qy 372 gtccaagctggaaagaaggtccctctggaaagcaagggaactaagacctcaaggcaaac 431
Db 373 GTCTAGCTGGGAAAGAGTCCCTCTGGGAAGCAGGGGAAACATAGGACTTCAAGCCAAAC 432
Qy 432 caagttcctaaaggaagagctgggcccacaaagagaagtagtgcctcctgacctgaagat 491
Db 433 CAGGTCTTAAAGCAGAGGCTGGGCCCAAGAGAGAGTAGTGTCTCTTGATGACAGAGAT 492
Qy 492 ctcaaggggcaaaagctccacagagcccacaggaagaagagtggtccctggtgcaag 551
Db 493 CTACAGGGGCAAAAGCTCCACAGGCCCAAGGAGAGAGAGGTGCTGCTGTGCAAG 552
Qy 552 gagcccaagggaatctgtgagcagcagagacctgcgcagctgcgtccacagggagctc 611
Db 553 GAGCCCA -GGAATGCTGGAGCAGCAGAGACTGCGGA -CTGCCGCTCCACAGGACCTC 610
Qy 612 caggttcca -ggggggcccaagacccaaggggagacaggttcc -tgagacagag 668
Db 611 CAGGTTCCAGGGGGCCCCCAGACTCAAGGGGACAGAGAGGTTCTCTGAGAACACAGAG 670
Qy 669 gaactaaaggtg -aaaggggcttcag 695
Db 671 GAAATTAAGGTGAAAGGGGCTCCAG 698

RESULT 5
LOCUS BF101636 739 bp mRNA EST 19-OCT-2000
DEFINITION 60127253F1 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:3980846 5',
ACCESSION BF101636
VERSION BF101636
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.

REFERENCE 1
AUTHORS Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE NIH-MGC http://mgc.nci.nih.gov/
JOURNAL National Institutes of Health, Mammalian Gene Collection (MGC)
COMMENT Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgaaps-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LAM9177 row: b column: 15
High quality sequence stop: 683.
Location/Qualifiers
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/clone_image="3980846"
/clone_id="NCI_CGAP_Mam1"
/tissue_type="tumor, biopsy sample"
/dev_stage="3 months, virgin"
/lab_host="DH10B"
/Note="Organ: Mammary; Vector: pCMV-SPORT6; Site: 1; Salt:
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"

BASE COUNT 190 a 174 c 254 g 121 t
ORIGIN

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Query Match 38.98; Score 603.8; DB 144; Length 739;
Best Local Similarity 98.28; Pred. No. 2,7e-158;
Matches 663; Conservative 0; Mismatches 7; Indels 5; Gaps 5;

Qy 64 tglacagcccttggaatctggagacagaatgaagagctctcagagatcagtaacc 123
Db 14 TGTACAGCCCTTGGAATCTGGAGACAGAAATGAAGAGCTCTCGAGATCAGTACC 73
Qy 124 caaaccttcaccctcctgctatgtgtagcccaagagaatgagctcgtgctgtagatg 183
Db 74 CAACACCTTCACCTTATGATGTAGCCCAACAGAGAAATGGCTCTGCTGCTGATAGG 133
Qy 184 acggatctggagaagagctccacaggggtgagaaggtgtgtcaggtcttcagagctac 243
Db 134 ACGGATGAGAGAGAGGTCACAGGGGTAGAGAGGAGTATCCAGGTTTCCAGAGACTAT 193
Qy 244 ggggtctcaggtgttcagagggccctacaggttcagttgacccaagagagagatgctc 303
Db 194 GGGGCTCTCAGGGTTCAGGGGCCCTACAGTTCAGTTGACCCAAAGAGAGATGGCTC 253
Qy 304 tgcctggaaccttgacccaagagagagagctgtgactaagtgtgacctcagagctccag 363
Db 254 TGCTGGCAACTGTGACCAAGAGAGAGAGAGAGTGTGACTAAGTGTGACTCCAGACTTCCAGG 313
Qy 364 tattctgttcagctggagaagaagtlccctctggagaagagagagagacataagactca 423
Db 314 TATTCTGTGTCAGCTGGAAAGAGAGTCCCTCTGGAGAGAGGAGACATAGGACTCA 373
Qy 424 agccaacacaggtctcctaagaagagagctgtggcccaagagaagtagtgcctgagat 483
Db 374 AGCCAAACAGAGTCTTAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 433
Qy 484 gcaaggaatctacagagggcaaaagctccacagggccccaagagagagagagagctc 543
Db 434 GCAAGGATCTACAGGGGCAAAAGCTCCACAGGCCCAAGGAGAGAGAGAGAGAGAGAG 493
Qy 544 tgtcaagagagcccaagagagagagctgtgagacagagagagcttcgagctcaggtccaca 603
Db 494 TGTGCAAGAGAGCCCA -GGAATGCTGGAGCAGCAGAGACTG -CGAGCTCCCGGTCCACA 551
Qy 604 gggagctccaggttcagagggggcccccagagctc -aagggagacagaggtgtctctggag 662
Db 552 GGGAGCTCCAGGTTCCAGGGGGCCCCCAGAGACTCAAAAGGGGACAGAGTGTCTCGGAG 611
Qy 663 acaaggaatcaaaaggtgaaggggctccagacagtgctcctcagagcagatag 722
Db 612 ACAGAGGAATCAAGGTGAAGCGCGGTTCCAGACAG -GCTGCTGTGAGGCAG -AGATGG 669
Qy 723 aggccttaaaagaa 737
Db 670 GGCTTTAAAGGAA 684

RESULT 6
LOCUS BE382093 639 bp mRNA EST 21-JUL-2000
DEFINITION 601272253F1 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:3601620 5',
ACCESSION BE382093
VERSION BE382093
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.

REFERENCE 1
AUTHORS Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
TITLE NIH-MGC http://mgc.nci.nih.gov/
JOURNAL National Institutes of Health, Mammalian Gene Collection (MGC)
COMMENT Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgaaps-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.

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DB	Sequence	Position
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Db	361 CTCTGGGAAACAGGGGAAACATPAGGACCTCAAGGCCAACAGGTCTTAAAGAGAAAGGCTGG	420
Qy	454 gcccaagaaggaaaglaagtgctctcttgcaatgcatacctcaaggagggcaaaagctccac	513
Db	421 GCCCAAGAAGGAGGTACGTGCTCTGTGCATCCAAAGGATCTCAGGGGCAAAAGGCTCCAC	480
Qy	514 aggccccaaggagaaagagtgctgcccttggtgtgcaaaagaaacccaaggaatgcttggagc	573
Db	481 AGGCCCCCAAGGGGAAAGAGAGTGCCTGTGTTGCCAAGGAGCCCCCAGGGAAATGTGGAGC	540
Qy	574 agcaggaacttccggagccttcgggttcacagc	605
Db	541 AGCAAGAACTGC--GGACTGCTCCGCTCCACAGG	570

RESULT	B
BE370239	
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Accession	BE370239
Version	BE370239
Keywords	EST.
Source	house mouse.
Organism	Mus musculus

REFERENCE	AUTHORS	TITLE	JOURNAL	COMMENT
1 (bases 1 to 537)	Manuella; Euthelia; Rodentia; Sciurognathi; Muridae; Murinae; Mus			
	NIH-MGC http://mgc.ncl.nih.gov/ .			
	National Institutes of Health, Mammalian Gene Collection (MGC)			
	Unpublished (1999)			
	Contact: Robert Strauch			

Tissue Procurement: Gilbert Smith, Ph.D.
 cDNA Library Preparation: Life Technologies, Inc.
 DNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 Cloning Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
 Plate: LLM8757 row: 1 column: 19
 High quality sequence stop: 537.
 Location/Qualifiers
 1..537

/organism="Mus musculus"
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 Stem cell origin."
 /lab_host="DH10b"
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 Site_2: NotI. Cloned unidirectionally. Primer: 5' SalI
 library constructed by Life Technologies. Investigator
 providing samples: Gilbert Smith, NIH"

[illegible]

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QY	288	aagagagaatgctctctgtctgggaaccttgaccacaaggagaagacgttgactaaagtggac	347
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QY	348	ctccaggaactccaggtatctcctgtgtccagctgggaagaaggtccctctgggaagaag	407
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RESULT	9
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LOCUS	
DEFINITION	BC243812 530 bp mRNA
ACCESSION	602337834P1 NCI_CGAP_Mam1 Mus musculus CDNA clone IMAGE:4486233 5'
VERSION	BC243812
KEYWORDS	EST.
SOURCE	house mouse.
ORGANISM	Mus musculus
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
TITLE	1 (bases 1 to 530)
JOURNAL	NIH-MGC http://mgc.nci.nih.gov/.
COMMENT	National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999) Contact: Robert Strausberg, Ph.D. Email: cgapps-remail.nih.gov Tissue Procurement: Gilbert Smith, Ph.D. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution Information can be found through the I.M.A.G.E. Consortium/LNL at: http://image.jnl.nih.gov plate: LLM10329 row: d column: 10 High quality sequence stop: 530. Location/Qualifiers 1..530

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Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT
library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"

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DEFINITION 602335287F2 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:4458453 5', mRNA sequence.
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 VERSION B3176062.1 GI:12682765
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 SOURCE house mouse.
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 980)
 AUTHORS NIH-MGC http://mgc.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: Gilbert Smith, Ph.D.
 cDNA Library Preparation: Life Technologies, Inc.
 DNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
 http://image.llnl.gov
 Plate: LHAM10256 row: n column: 22
 High quality sequence stop: 630.
 Location/Qualifiers
 1..980

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BASE COUNT 286 a 246 c 319 g 129 t
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 Matches 667; Conservative 0; Mismatches 72; Indels 14; Gaps 13;
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RESULT 12
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 ACCESSION BE284648
 VERSION BE284648.1 GI:9161730
 KEYWORDS EST.
 SOURCE house mouse.
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 653)
 AUTHORS NIH-MGC http://mgc.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
 cDNA Library Preparation: Life Technologies, Inc.
 DNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
 http://image.llnl.gov
 Plate: LHAM512 row: c column: 08
 High quality sequence stop: 547.
 Location/Qualifiers
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BASE COUNT 170 a 157 c 222 g 104 t
 ORIGIN

Query Match 30.8%; Score 478.2; DB 165; Length 653;


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